Pioneer sound.vision.soul

DVD RECORDER

PRV-LX1

DVD VIDEO/R/RW

HDD HARD DISK DRIVE

Operating Instructions

IMPORTANT

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT SAFETY INSTRUCTIONS

H003 En

READ INSTRUCTIONS — All the safety and operating instructions should be read before the product is operated.
RETAIN INSTRUCTIONS — The safety and operating instructions should be retained for future reference.
HEED WARNINGS — All warnings on the product and in the operating instructions should be adhered to.
FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.
CLEANING — Unplug this product from the wall outlet before cleaning. The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.
ATTACHMENTS — Do not use attachments not recommended by the product manufacturer as they may cause hazards.
WATER AND MOISTURE — Do not use this product near water — for example, near a bathtub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
ACCESSORIES — Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
CART — A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

VENTILATION — Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
POWER SOURCES — This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.
LOCATION – The appliance should be installed in a stable location.
NONUSE PERIODS – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
PLUG – This product is equipped with a wired grounding-type plug (a plug having a third (grounding) pin). This plug will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug fully into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

GROUNDING OR POLARIZATION
- If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- If this product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin, it will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
OUTDOOR ANTENNA GROUNDING — If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.
LIGHTNING — For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
POWER LINES — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

OVERLOADING — Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
OBJECT AND LIQUID ENTRY — Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
SERVICING — Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
DAMAGE REQUIRING SERVICE — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or damaged in any way.
- When the product exhibits a distinct change in performance — this indicates a need for service.

REPLACEMENT PARTS — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
SAFETY CHECK — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
WALL OR CEILING MOUNTING — The product should not be mounted to a wall or ceiling.
HEAT — The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

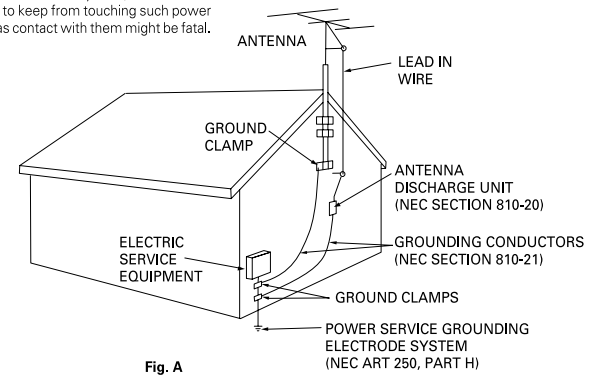
ANTENNA
LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)

Fig. A

NEC — NATIONAL ELECTRICAL CODE

WARNING: THE APPARATUS IS NOT WATERPROOFS, TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE AND DO NOT PUT ANY WATER SOURCE NEAR THIS APPARATUS, SUCH AS VASE, FLOWER POT, COSMETICS CONTAINER AND MEDICINE BOTTLE ETC. H001BEn

CAUTION:
This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections. H012 En

[For Canadian model]
This Class A digital apparatus complies with Canadian ICES-003.

[Pour le modèle Canadien]
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada. H060 2L

Information to User
Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment. H011 En

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. H061 En

CAUTION : USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION : THE USE OF OPTICAL INSTRUMENTS WITH THIS PRODUCT WILL INCREASE EYE HAZARD. H013 En

DANGER – VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.

WARNING:
Handling the cord on this product or cords associated with accessories sold with the product will expose you to lead, a chemical known to the State of California and other governmental entities to cause cancer and birth defects or other reproductive harm.
Wash hands after handling.

For pluggable Equipment, The Socket-Outlet Shall Be Installed Near The Equipment and Shall Be Easily Accessible.

[For U.S. model]

IMPORTANT NOTICE H006AEn

The serial number for this equipment is located in the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

WARNING: THIS PRODUCT EQUIPPED WITH A THREE-WIRE GROUNDING TYPE PLUG, A PLUG HAVING A THIRD (GROUNDING) PIN, IT WILL ONLY FIT INTO A GROUNDING TYPE POWER OUTLET. THIS IS A SAFETY FEATURE. IF YOU ARE UNABLE TO INSERT THE PLUG INTO THE OUTLET, CONTACT YOUR ELECTRIAN TO REPLACE YOUR OBSOLETE OUTLET. DO NOT DEFEAT THE SAFETY PURPOSE OF THE GROUNDING TYPE PLUG. H043A En

Confirm Supplied Accessories

- ☐ Remote control unit (1)
- ☐ AA batteries (2)
- ☐ Air filter replacements set (1)
- ☐ Power cord 2-meters (1)
- ☐ Warranty (1)
- ☐ Operating Instructions (1)

- If any of the above accessories are missing, contact your dealer.

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Precautions

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly.

- **Care must be taken not to infringe copyright restrictions under the laws of each country.**
  If this device is used to record copyrighted materials, approval must be obtained from the respective copyright holders. The recording of copyrighted materials without the express approval of the respective copyright holders may result in legal penalties. Pioneer disclaims any and all responsibility for any legal damages resulting from the use of this device in the unauthorized copying of copyrighted materials.
- **Pioneer may not be held liable for the loss of any data or any other direct or indirect damage suffered as the result of the use or breakdown of this product.**
- **All names of corporations, products, and systems listed herein, even when the (™) or (®) symbols are omitted, should be considered the registered trademarks of their respective owners.**

Installation Notes

- Install in a level, stable location. Avoid unstable locations, or locations exposed to strong vibrations.
- Do not interfere with the dispersion of heat from the unit. Avoid using the unit on deep pile carpets or other thick fabrics, and do not cover the unit with blankets or cloths. Such usages may interfere with cooling and result in malfunctions.
- Do not place other objects on top of the unit.
- Install in a location not exposed to other sources of heat.
  Avoid installing the unit on top of amplifiers or other components that emit heat. When mounting the unit in a rack, avoid the effect of heat from amplifiers and other audio components by installing the PRV-LX1 as low as possible beneath the other components in a well-ventilated position in the rack.
- When mounting the unit in a rack, special precautions are necessary to avoid heat rise inside the unit. As a general rule, install the unit in a location not exposed to heat from below, and with at least 10 cm clearance to right and left and above, to provide for natural convection (ambient temperature below 35 °C).
  Under other conditions, install so that when fully warmed up, the temperature at a point 5 cm above the center top of the case is below 35 °C. Provide for the installation of some means of forced ventilation if necessary.
- When connecting multiple PRV-LX1 units in series and using an external means of controlling power ON/OFF, the initial current surge will become quite large. Consult your Pioneer service center regarding the ratings for power switches used with such an installation.
- Do not install in fully enclosed rack mounts, since damage may result from overheating.

Environment Conditions

Ambient conditions during use should be within the range of +5 °C to +35 °C (+41 °F to +95 °F) and 85% Relative Humidity (with ventilation ports not blocked).

■ Prohibited Installation Locations

- Places exposed to direct sunlight or bright artificial light.
- Places exposed to high levels of dust or smoke.
- Places subject to vibration.
- Places subject to strong electrical or magnetic fields.
- Close to heat sources.
- Places exposed to high levels of electrical noise.
- Places liable to the generation of electrostatic noise.
- Places exposed to high humidity or poor ventilation.
- Fully enclosed rack mounts.

About Condensation

During winter months when the unit is moved from a cold location into a warm room, or when the temperature of the installation location is raised suddenly, condensation may form on the unit's internal parts (drive mechanism, laser lens, hard disk, etc.). When condensation forms, the unit will not operate. To eliminate the condensation, disconnect the power cord and allow the unit to warm to room temperature. Depending on the degree of condensation, this may require 1-2 hours. Once the unit has warmed sufficiently, it will become operational again.
Condensation may also form during summer months if the cool air from an air conditioner is directed toward the unit. In this case, change the installation location of the unit or the air conditioner.

Moving the Unit

If transporting of the unit is required, be sure to use the original packing materials supplied with the unit, and avoid subjecting the unit to impact, vibration, or dropping. Also take precautions to avoid exposing the unit to heat or moisture during the move.
Always remove any discs from the unit before moving. Moving the unit with a disc loaded may result in scratches to the disc or internal damage to the drive unit.

■ Special Precautions

Never move the unit during playback or recording. During playback and recording, the disc is rotating at very high speed, and lifting or moving the unit during this time may result in damage to the disc. Subjecting the unit to strong impacts or vibrations when a disc is loaded may also result in damage to the disc or internal parts of the unit. When it is necessary to transport the unit, stop any recording or playback operations, and remove any disc that is loaded. Remove discs anytime lifting or moving of the unit is required.
This unit is designed with precision optical devices. Take special care to control room temperature and dust in the installation location.

About Copyright

- Unauthorized copying, broadcast, public performance, or rental of copyrighted discs is prohibited by law.
- This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.
- This unit is equipped with copy prevention technology, and will not permit the unauthorized copying of contents recorded by their copyright holders with copy-prevention signals.
- This unit does not support recording of DVD-RW discs in VR mode. As a result, it also does not support CPRM ("copy once") discs.
- This unit features a **GNU/Linux system** based on a GNU general public licence.
  The contents of this contract can be found on page 83.

About the use of Dolby Digital Logo

Audio bitstreams created with this system are not intended for distribution on DVDs bearing the Dolby Digital logo.
For more information on the use of Dolby trademarks and logos, please contact Dolby Laboratories: **http://www.dolby.com**

■ Precautions when starting

When powering on the unit (from the time the power is turned on until the STOP button lights; see page 15), do not operate the keyboard until the monitor displays the PRV-LX1 logo. If the startup procedure is interrupted due to inadvertent keyboard input, press the keyboard's [ESC] key.

Precautions Regarding Built-In Hard Disk Drive (HDD)

The built-in hard disk drive (HDD) incorporates high-precision technology, and recorded contents may be damaged or lost under certain conditions of use. Take precautions regarding the following:

Important recordings should not be left permanently on the HDD, but preserved as DVD-Video discs by means of DVD-R/RW recording.

■ Important Recordings

If the built-in hard disk drive malfunctions, contents previously recorded on the drive may be lost. Important recordings should not be left permanently on the HDD, but preserved as DVD-Video discs by means of DVD-R/RW recording. Pioneer disclaims any responsible for loss of recorded data or other collateral damage arising from any malfunction, including failure of the HDD at the end of its operating lifetime.

Pioneer disclaims all responsibility for the integrity of contents recorded on hard disk drives or DVD discs, and for any damages resulting from the loss of such contents.

■ Precautions Regarding Installation and Use

- ▼ Do not subject the unit to vibration and impacts. Subjecting the unit to such vibrations or impacts during operation is particularly to be avoided, since malfunctions may result.
- ▼ Do not install unit in unstable locations, or locations exposed to vibration.
- ▼ Always install in level horizontal position.
- ▼ Do not block the rear cooling fan and front lower air intakes. Malfunctions may result from attempting to use the unit with the fan or vents blocked.
- ▼ Two dust filters are installed in the air intakes on the unit's front lower panel (see page 14). With time, the air filters will gradually become soiled with dust. If the unit is subjected to continued use with dirty filters, the unit pay not perform to its full, and malfunctions may occur. As a result, please replace the filters at regular intervals (see the appended **"Air Filter Replacement Instructions and Precautions"**).
- ▼ Do not use the unit in environments exposed to high temperature or humidity. Also, avoid using the unit in locations exposed to sudden changes of temperature, since condensation may occur on internal parts, leading to possible damage to the hard disk drive (HDD) and other malfunctions. Consult the section **"About Condensation"** on page 5.
- ▼ When power is turned ON, do not turn off the rear panel's power switch, disconnect the power plug, or trip the power breaker to the power outlet.
- ▼ Do not move the unit when the power is turned ON, or immediately after turning the power OFF. When moving the unit is required, follow these guidelines:
  1. **Turn power OFF.**
     Press the STANDBY/ON switch so that the power indicator appears orange, then wait at least two minutes.
  2. **Turn off the main power switch on the rear panel.**
  3. **Disconnect the power cord from its outlet.**
  4. **Move the unit.**
- In the event of a malfunction, removal of the entire unit may be necessary for repair (depending on the kind of malfunction). In such cases, consult your service dealer to have the unit removed by professional installation personnel. Failure to have the unit removed by professional installation personnel may result in refusal of repair service.

■ Usable Lifetime of the Hard Disk Drive

- ▼ The hard disk drive (HDD) is a high precision device, and when subjected to severe environmental or usage conditions, may reach the end of its operating lifetime in only a few years.
- ▼ Frequent symptoms occurring when the HDD approaches the end of its lifetime including "part or all of the playback image will repeatedly enter pause mode," or "block noise (mosaic distortion) and other image distortion will occur". The HDD may also reach the end of its lifetime even without these symptoms occurring.
- ▼ When the HDD reaches the end of its operating lifetime, any data recorded on it may become unrecoverable. When the HDD malfunctions at the end of its operating lifetime, it must be replaced.
  (In the event of HDD failure, any data recorded on the HDD cannot be recovered.)

Data Protection in Event of Power Failure

While operating this unit, if a power failure occurs, the main power switch is turned OFF, the power cord is disconnected, or other interruption in AC power occurs, the data recorded on the HDD and DVD may be lost.
To prevent such untoward occurrences, we recommend that this unit be connected to an Uninterruptible Power Supply (UPS).
UPS devices supported by this unit include the following:
AMERICAN POWER CONVERSION CORP. (APC)

Smart-UPS 500
Smart-UPS 700VA (SU700NET)

* The Smart-UPS 500 is a model marketed only in Japan.

* APC and Smart-UP are trademarks or registered trademarks of the American Power Conversion Corporation.

* The UPS devices supported may be subject to change; for latest information on supported devices, consult your Pioneer dealer or Pioneer Electronics (USA) Customer Support Division listed at the end of this manual.

See page 30 for connections used when employing a UPS.

Cleaning Care of the Unit

- ▼ Normal cleaning should consist of dry wiping the unit with a soft cloth. In the event of severe soiling, make a dilution of 1 part neutral deutergent in 5 or 6 parts water. Dip a soft cloth in the solution and wring well, then wipe away the dirt, followed by a gentle wiping with a soft dry cloth.
- ▼ Avoid contact of the unit with alcohol, thinner, benzene, insecticides or other similar chemicals, since they may cause the unit's labeling or finish to peel.
- ▼ Avoid long term contact of the unit with rubber or vinyl objects, since damage to the cabinet finish may result.
- ▼ When using a chemically impregnated cleaning cloth, read the instructions accompanying the cloth and follow all cautionary notes.
- ▼ Disconnect the power cord from its outlet before performing cleaning.

Cleaning the pickup lens

The DVD recorder's lens should not become dirty in normal use, but if for some reason it should malfunction due to dust or dirt, consult your nearest Pioneer authorized service center. Although lens cleaners for CD players are commercially available, we do not recommend using them since some may damage the lens.

Disc Precautions

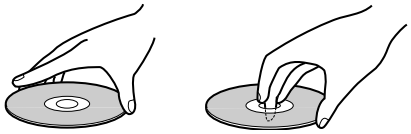
■ Recommended Discs

- Use only recommended disc media in order to assure stable recording and playback.
- Consult your nearest Pioneer-authorized service center regarding recommended disc media.

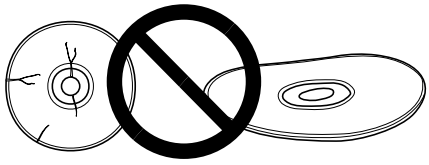
■ Handling of Discs

Discs may become incapable of recording and playback when scratched, or when soiled with fingerprints or dust. Always handle discs as noted below:

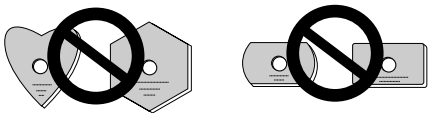
- Never touch the recording surface (mirror surface) when handling discs. Hold discs between their edges, or between one edge and one finger in the center hole.



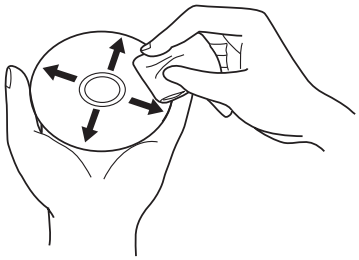
- Do not apply adhesive tapes or labels to discs.
- Do not use cracked or warped discs, since they may shatter dangerously at high rotation speeds.



- Do not use non-standard discs, since they may cause adverse affects to the player and other components.
- Do not use discs shaped in non-circular shapes (hearts, polygons, etc.), since they may cause malfunctions.



- To clean fingerprints from a soiled disc, wipe gently from the center hole radially toward the circumference. Do not wipe in a circular motion.



- Do not use anti-static or other record sprays. Also, never use benzene, thinner or toher volatile cleaners to clean the surface of discs, since such chemicals may melt or otherwise damage the surface.

Always store discs in their protective cases; before use, check the recording surface for fingerprints or other soiling.

Disc Problem Checklist

■ Data recording errors or inability to record

- Was a recommended disc used ?
- Was sufficient recording area on the disc?
- Had the disc been finalized after previous recording sessions?
- Was the disc loaded properly, recording surface down and label up?
- Was the disc soiled or scratched?

■ Playback errors

- Was a recommended disc used ?
- Was the disc properly recorded (not empty)?
- Was the disc soiled or scratched?
- Condensation of moisture on the player's optical parts or disc surface is also a possibility; allow the disc and player to sit for 1-2 hours before attempting to use again.

Preparations for Use: Basic Information

About DVD-R / DVD-RW Discs

▼ The DVD-R/RW (video mode) discs recorded on this unit can be finalized (see page 40) to allow them to be played* on other standalone DVD players, automobile DVD players, or DVD players installed in computers. Some players, however, may exhibit the following symptoms when an attempt is made to play such discs:

- Discs aren't accepted by the player.
- Macroblock distortion (mosaic pattern) frequently appears in the video image.
- Sound and image are interrupted.
- Playback stops midway through.

When a DVD-R/RW disc is finalized, further recording to the disc becomes impossible.

* The DVD Forum in 2000 approved the use of the DVD-Video format for recording on DVD-R/DVD-RW discs. On Pioneer's DVD Recorders, this is referred to as recording in Video Mode. Supporting playback of DVD–R/DVD-RW with this type of content is optional for manufacturers of DVD playback devices, and there are DVD-Video players, DVD-ROM drive equipped PCs or other DVD playback devices that do not play DVD-R or DVD-RW discs recorded in the Video Format.

Recordable discs

Logo	Attributes
DVD RW **DVD-RW**	12cm, single-sided, single layer disc Approx. max. recording time: 360 minutes (4.7GB)
DVD R R 4.7 **DVD-R**	12cm, double-sided, single layer disc Approx. max. recording time: 720 minutes (9.4GB)

* This unit does not support use of 8 cm DVD-R discs.

▼ **DVD-R/RW discs are especially sensitive to dust, fingerprints, and scratches. Since a scratch on the disc may make further recording impossible, and may make it impossible to playback important data recorded on the disc, take special precautions in handling and storing these discs.**

▼ **CD-R/CD-RW discs cannot be recorded on this unit.**

DVD Recording Modes

Video Mode:

▼ The "video mode" employs the same recording format as commercially sold DVD video discs. As a result, discs recorded on this unit can be played on other DVD players, but discs must be finalized before they can be played in this way (see page 40).

▼ Recording to DVD-R/RW discs is in video mode only.

▼ When recording in video mode, until a disc is finalized, it cannot be played back or further recorded/edited except on this unit.

*** This unit does not support VR mode recording on DVD-RW discs.**

Precautions When Recording in Video Mode

▼ Discs recorded in video mode on other recorders and which have not yet been finalized on their original recorders cannot be played back or further recorded/edited (including finalizing) on this unit.

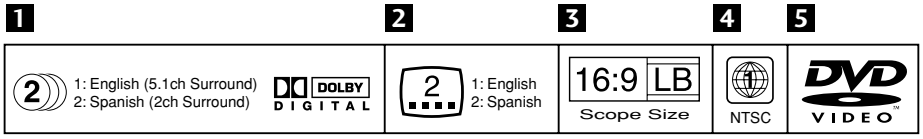
▼ When recording DVD-RW discs in video mode use only disc media compatible with Ver. 1.1 or later.

▼ When using DVD-RW in video mode, discs must first be formatted. For details, see page 39.

▼ The remaining recording time decreases each time recording is performed. Additional recording is possible so long as remaining space is still available on the disc unless finalization has been performed (see page 40). However, the remaining time cannot be returned to the state prior to recording, nor can previously recorded data be overwritten.

DVD disc box information

When you buy a DVD-Video in the shops, the back of the disc box usually contains various information about the contents of the disc. Below is an example, with an explanation of each section.



1 Audio languages and audio formats

DVD-Video discs can contain up to 8 separate soundtracks with a different language on each. The first in the list is the original soundtrack. This section also details the audio format of each soundtrack—Dolby Digital, DTS, etc.

Dolby Digital DOLBY DIGITAL

Dolby Digital is the most widespread DVD-Video audio format. Dolby Digital soundtracks can be mono, stereo, or contain up to 5.1 channels (the .1 refers to a special low-frequency effects channel).

DTS DIGITAL dts SURROUND

DTS is another 5.1 channel surround format sometimes used on DVD-Video discs, often in addition to a Dolby Digital track.

Linear PCM

Linear PCM audio also sometimes appears on DVD-Video discs, usually on music related material. Linear PCM sountracks are mono or stereo only.

2 Subtitle languages

DVD discs can contain up to 32 subtitle languages. You can watch the disc with any of these subtitle languages, or with no subtitles displayed at all.

3 Screen aspect ratio

Movies are shot in a variety of screen formats. This box tells you what the original format was (in this case, Cinemascope), and what it is best viewed as on a widescreen TV and a regular 4:3 TV. In this case, if you have a regular 4:3 TV, it is recommended that you watch it in letterbox mode.

4 Region code and TV format

The world is divided into 6 DVD regions. Both discs and players are coded for a particular region, and to be able to play a disc, it must contain the same region code as the player.
This section also contains the TV format of the disc. In this case, NTSC.

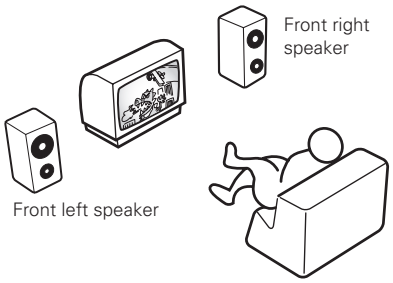
5 DVD-Video logo

Angle mark ( )

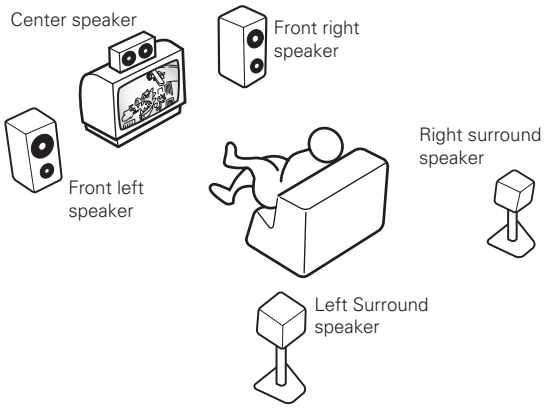
Some DVD-Video discs feature scenes shot simultaneously from two or more angles. During playback, you can switch between these different angles.

- Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
- "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.

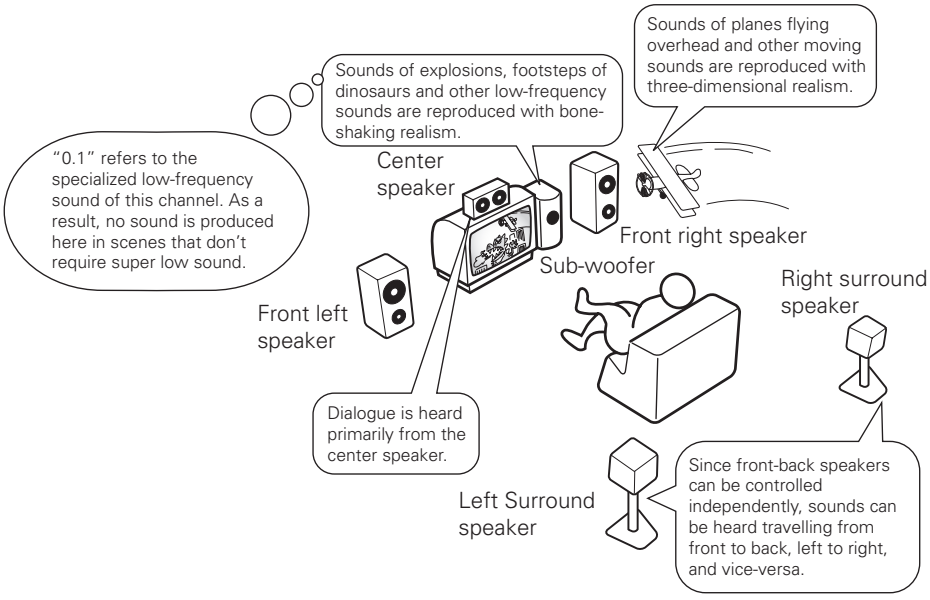
▼ **Stereo Playback:**
Stereo playback means sound is played back through independent channels from right and left speakers. The soundtracks for DVD video stereo and ordinary music CDs (recorded with 2ch stereo) are played back only from the front speakers, even when 5 surround speakers or sub-woofers are connected.



▼ **Dolby Surround Playback:**
When Dolby Surround is noted on a commercially purchased DVD video, it means that sound can be played back from five surround speakers.



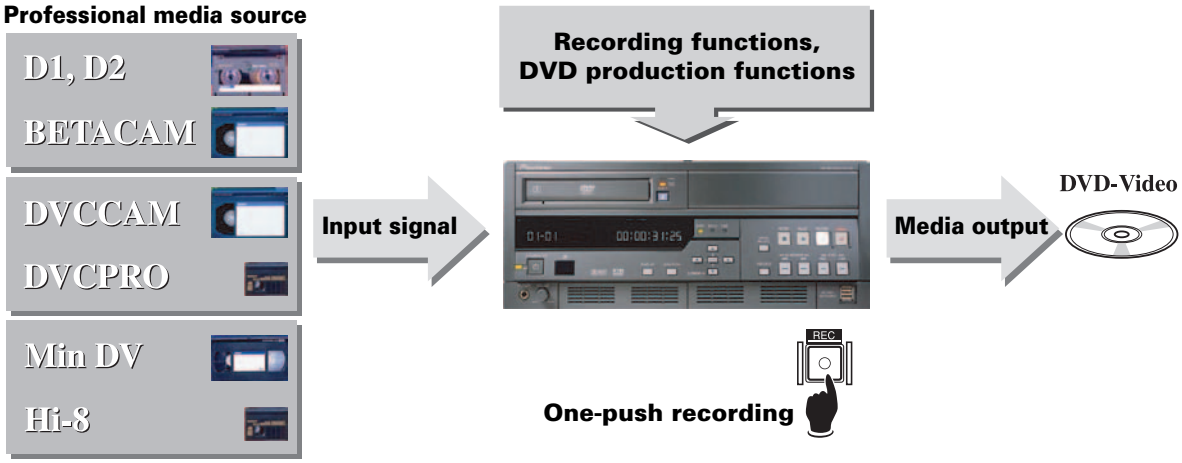
▼ **Dolby Digital 5.1 ch or DTS Surround Playback:**
Programs recorded in Dolby Digital (5.1 ch surround) or DTS surround mode are played back through 5 surround speakers plus sub-woofer, each with its own independent channel. Since each channel is recorded independently, the reproduced sound has high presence and three-dimensionality.


Sounds of planes flying overhead and other moving sounds are reproduced with three-dimensional realism.
Sounds of explosions, footsteps of dinosaurs and other low-frequency sounds are reproduced with bone-shaking realism.
"0.1" refers to the specialized low-frequency sound of this channel. As a result, no sound is produced here in scenes that don't require super low sound.
Center speaker
Front right speaker
Sub-woofer
Front left speaker
Right surround speaker
Dialogue is heard primarily from the center speaker.
Left Surround speaker
Since front-back speakers can be controlled independently, sounds can be heard travelling from front to back, left to right, and vice-versa.

General Features of the PRV-LX1

Product Introduction

The PRV-LX1 is a DVD recorder developed by Pioneer for dedicated use in DVD-Video production. The broad range of interfaces built into the PRV-LX1 allows the input of professional mastering media (tapes) using professional component[*1] video signals.
One of the PRV-LX1's greatest features is its ability to create DVD-Video discs simply by pressing the REC button; without worrying about multiple DVD settings. A wealth of recording, playback, and DVD setting functions are provided for efficient DVD production. These features achieve efficient and high-performance operational characteristics for various DVD creation types.



[*1] Component video inputs supported by this unit include Betacam and SMPTE with signal levels as noted in the accompanying chart. Check the component output on your VTR or other connected component when making setting selections.

Color Bar (75%)

Betacam component	**Y**	**1Vp-p**	**0.714/0.286**
	B-Y/R-Y	**1Vp-p**	**±0.35 (75%)**
SMPTE Component	**Y**	**1Vp-p**	**0.7/0.3**
	B-Y/R-Y	**1Vp-p**	**±0.2625(75%)**

■ Dedicated HDD Hybrid Recorder for DVD-Video Creation

- 120GB Hard Disk Drive with up to two writer units[*2] permits the creation of a wide variety of DVD-Video discs.
- High-level DVD-Video authoring functions and video recording functions permit optimum disc creation for any application.

[*2] Requires optional writer unit **PRA-DW11**.

■ Professional System Support

- Equipped with a wide range of professional input and output systems including Component Input/Output, XLR Input/Output, DV Connector, Composite, S-Video, and an expansion slot for growh potential
- Supports RS-422A and DV protocols for time-code recording

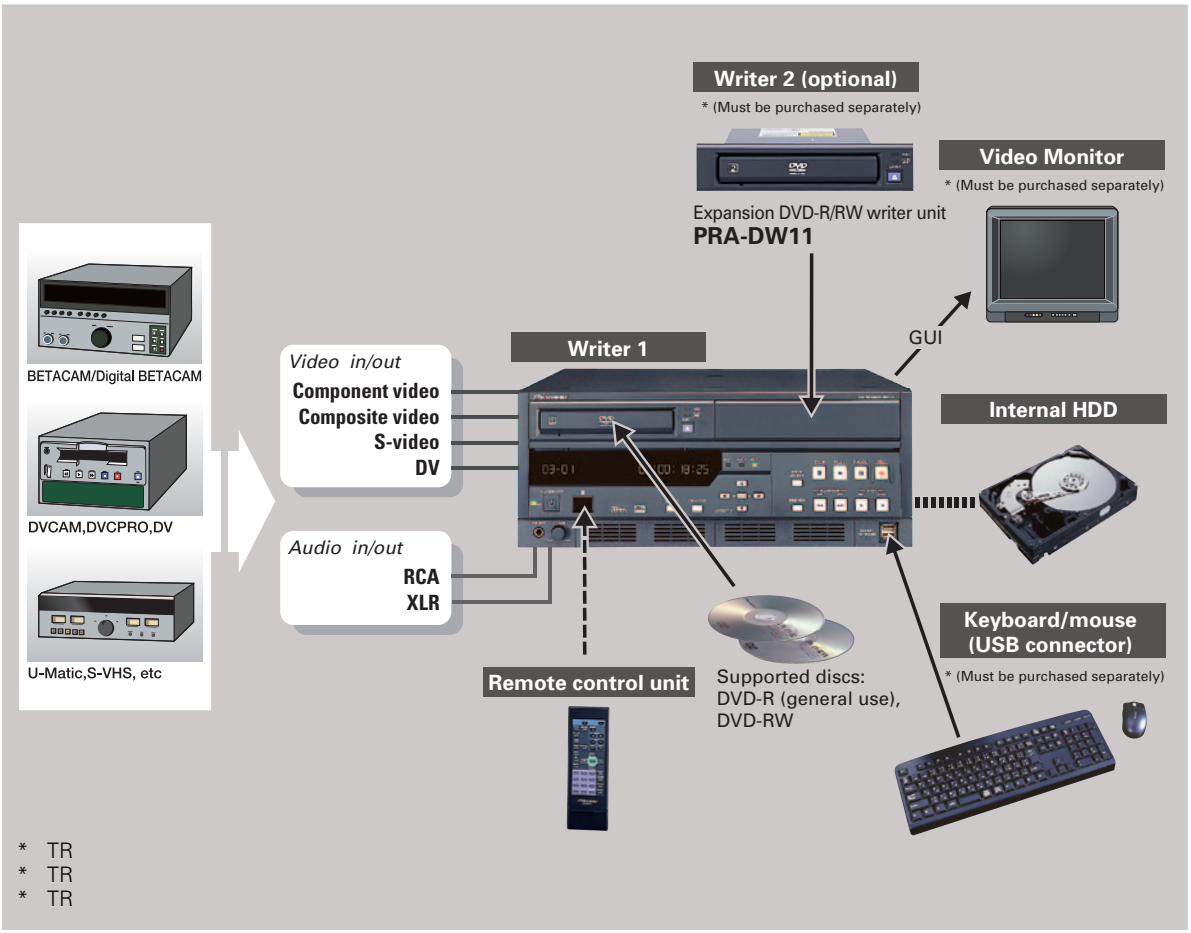
■ Features and Functions for Efficient DVD-Video Creation

- Dual-drive recording system for simultaneous 2-disc recording and disc duplication[*3] for efficient creation of dual and backup discs
- Built-in graphical users' interface (GUI) for dedicated use with DVD-Video authoring (supports use of main and remote buttons, as well as keyboard and mouse)
- Equipped with auto-capture function for smooth media conversion from tape sources (functions range from video input to DVD settings, for fully automated operation
- Supports Ethernet or DVD-R/RW disc input of EDLs, auto-capturing, customized menus and backgrounds
- Future programs available for upgrading the professional functions (requires user registration)

[*3] Duplication of copyright protected disc media is prohibited. Do not attempt to duplicate copyrighted discs without permission of the copyright owner.

Example of System Composition and Recording Component Setup

■ System Composition



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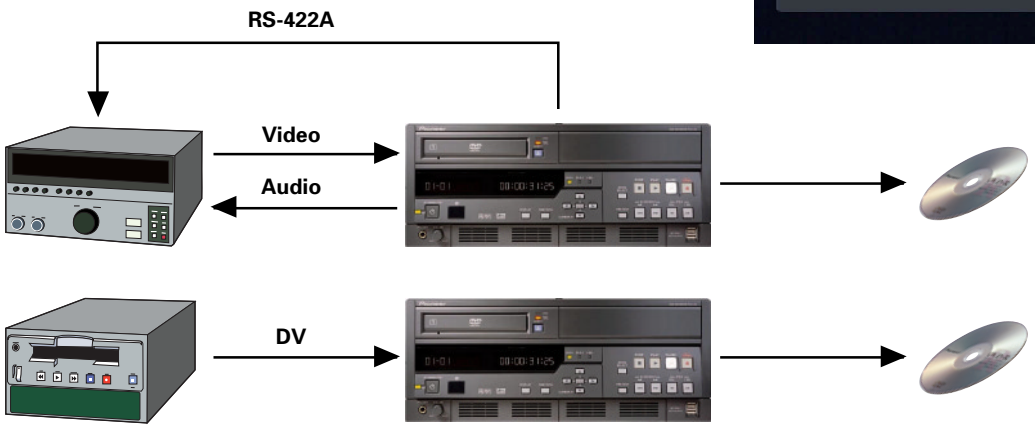


■ Regarding Recording Time

Recording to Hard Disk Drive → About 23-100 hours

* The capacity of the hard disk drive usable for recording is approximately 100 GB; continuous recording can continue until no more capacity remains or up to a maximum of 100 hours.

Recording to disc media → About 1-6 hours

Disc Recording Times

- When creating a project on a single disc (4.7 GB) without DVD menus
- Create a DVD-Video disc after pressing the **Make a Disc** button

Write / Read	DVD-R	DVD-R (4x)	DVD-RW
HDD	Max 2x About 30 minutes	Max 4x About 20 minutes	Max 2x About 30 minutes

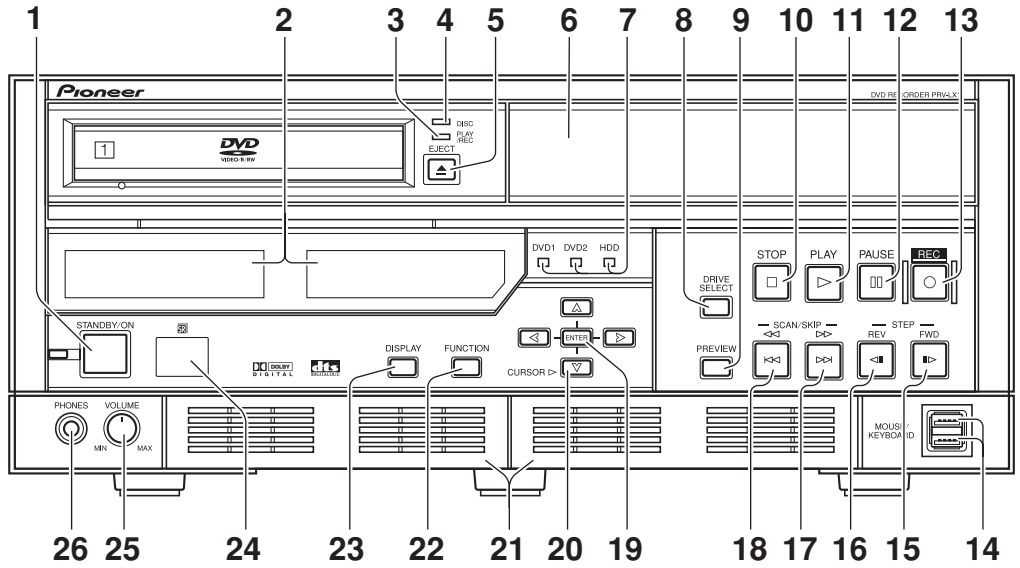
Disc Duplication Times

- DVD → HDD: Times required when copying one disc (4.7 GB) to the hard disk drive
- DVD → DVD: Times required when using optional additional drive to duplicate one disc (4.7 GB) from one DVD drive to another.

Write / Read	HDD	DVD-R	DVD-R (4x)	DVD-RW
DVD-Video	About 30 minutes	Max 2x (CLV) About 30 minutes	Max 2x (CLV) About 20 minutes	Max 2x (CLV) About 30 minutes
DVD-R	About 30 minutes	Max 2x (CLV) About 30 minutes	Max 4x (CLV) About 30 minutes	Max 2x (CLV) About 30 minutes
DVD-R (4x)	About 15 minutes	Max 2x (CLV) About 30 minutes	Max 4x (CLV) About 15 minutes	Max 2x (CLV) About 30 minutes
DVD-RW	About 30 minutes	Max 2x (CLV) About 30 minutes	Max 4x (CLV) About 15 minutes	Max 2x (CLV) About 30 minutes

Names of Parts

Front Panel Facilities



No.	Name	Function
1	**STANDBY/ON button**	When the unit is in the standby condition, pressing this button causes the power to come on; the power indicator (to the left of the button) changes from orange to green. The main display section indicates system startup. After system startup is completed, the unit enters "idling condition," and as the unit's display changes to show the current time, the **STOP** button lights. When the unit is in the standby condition, if this button is pressed while holding the **STOP** button depressed, the **Function Menu**'s setting values will be reset to their factory defaults, and the power will then turn ON. If the button is held depressed for one second or more when the unit is in the idling condition, the unit will perform system shutdown, followed by return to the standby mode (the power indicator will change from green to orange). In the event operation becomes unstable and manual forced shutdown is required, hold the button depressed for four seconds or more.
2	**Display sections**	
3	**PLAY/REC indicator**	Lights to indicate operating state of DVD1 and DVD2 drives. Appears green during PLAY mode, and orange during REC mode.
4	**DISC indicator**	Located to the right side of DVD1 and DVD2, these indicators light (orange) to indicate that a disc is loaded.
5	**EJECT button (⏏)**	Press to open/close the disc tray. The **DISC** indicator flashes from the time the button is pressed until the disc tray closes fully.
6	**Drive 2 cosmetic panel**	This space is provided to allow the addition of a second DVD drive. When an additional drive is added here, it is considered "DVD2." * For further information regarding expansion drives, consult your dealer.
7	**DVD1, DVD2, HDD (Hard disk Drive) indicators**	These indicators light to show which drive has been selected with the **DRIVE SELECT** button (the indicator for the selected drive lights green).
8	**DRIVE SELECT button**	Use to select the playback source and destination drive for recording. When only 1 drive is loaded, pressing the button causes the drive selection to change alternately between **HDD** (Hard disk Drive) → **DVD1**; when two drives are loaded, the selection changes in the order **HDD** (Hard disk Drive) → **DVD1** → **DVD2** → **DVD1&2**. When a drive is selected, the corresponding indicator lights (green). When **DVD1&2** is selected, **DVD1** is designated as the playback source.

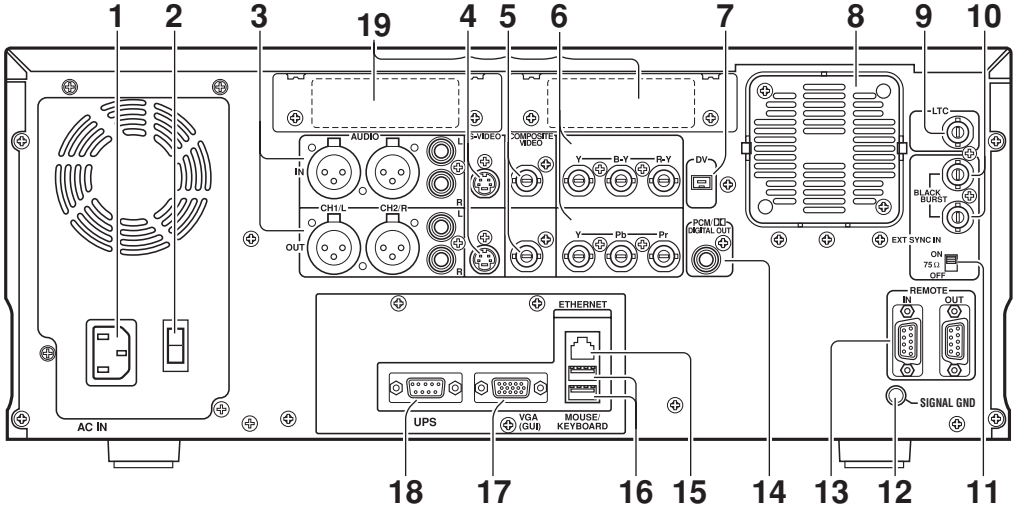
No.	Name	Function
9	**PREVIEW button**	When this button is pressed with the unit in the idling condition, a preview image/sound of the selected input (following encode and decode processing) is supplied to all output connectors except DV; when the button is pressed again, the unit returns to idling condition.
10	**STOP button (■)**	Functions to stop recording or playback. Until all internal operations are completed, the indicator flashes (white), and when fully completed, the unit returns to the idling condition and the indicator lights (white). Also, pressing the **STOP** button while holding the **CURSOR** (bottom pointing arrow) button depressed functions to switch between progressive encoding ON/OFF. **(*1)**
11	**PLAY button (►)**	When this button is pressed, playback begins from selected source (DVD drive or HDD), and the indicator lights (white). When **HDD** is designated as the recording destination and time shift recording has been set, this button responds even during recording, and initiates playback from the recording start.
12	**PAUSE button (II)**	When pressed, recording or playback is temporarily interrupted and the indicator lights (white). During recording, allows automatic setting of chapters. To resume recording from the recording pause mode, press the **REC** button.
13	**REC button (●)**	When pressed, recording begins to the selected recording destination (drive or project), and the indicator lights (white).
14	**MOUSE/KEYBOARD connectors**	Allows connection of a USB mouse and keyboard for control of the unit. **(*2)**
15	**STEP FWD button (II►)**	During normal playback, press for frame advance. Hold depressed for slow motion playback; during slow mode, press again to increase playback speed.
16	**STEP REV button (◄II)**	During normal playback, press for frame playback in reverse direction. Hold depressed for slow motion playback; during slow mode, press to decrease playback speed.
17	**SCAN/SKIP FWD button (►►/►►I)**	During playback, press to move to next title or chapter. Hold depressed to initiate scan mode.
18	**SCAN/SKIP REV button (◄◄/I◄◄)**	During playback, press to move to previous title or chapter. Hold depressed to initiate scan mode.
19	**ENTER button**	Press to select function menu items and commands, and to input DVD menu items and commands (during DVD playback). During recording, press to insert chapter marks at optional locations.
20	**CURSOR buttons**	Use when selecting function menu items, and for DVD menu control (during DVD playback).
21	**Filter cover (2)**	These are ventilation ports provided to prevent excessive heating of internal parts. During installation and operation, do not allow these ports to become blocked, since malfunctions may result. * Air filters are installed inside these filter covers, and must be removed and replaced at regular intervals. Continuing to use the unit with clogged filters may result in malfunction. Consult the appended instruction sheet **"Air Filter Replacement Instructions and Precautions"**.
22	**FUNCTION button (*3)**	Press to enable and disable the monitor's on-screen function menu display (default setting: DISABLED). When disabled, the unit returns to idling condition.
23	**DISPLAY button**	Press to turn on-screen display (OSD) ON/OFF (default setting: OFF). This button does not operate when on-screen function display is set to DISABLED.
24	**Remote control sensor (5R)**	Receives signals from the remote control unit. Do not allow this part to be blocked by other objects.
25	**VOLUME knob**	Use to adjust output level to the headphones jack.
26	**PHONES jack**	Use to connect headphones.

***1** • Connect to progressive-scan TV monitor. Non-progressive monitors will not produce correct playback.
• When progressive is set to ON, no video is output to any output connectors except the component output.

***2** Functionality is not guaranteed on all possible mouse/keyboards. If unstable operation is experienced, try reconnecting the USB connector. If operation continues to be erratic, consult your Pioneer dealer or one of the service centers listed at the end of this manual.

***3** This operates the same as the remote control unit's **SETUP** button. The **FUNCTION** button operates only in the idling condition.

Rear Panel Facilities



No.	Name	Function
1	**AC IN connector**	Connect to power cord.
2	**Main power switch**	When set to ON, the unit enters standby condition and front panel indicator lights orange.
3	**AUDIO CH1/L CH2/R IN/OUT connectors**	Input/output connectors for analog audio CH1/L CH2/R signals.
4	**S-VIDEO IN/OUT connectors**	Input/output connectors for S-VIDEO video signal. Output is compatible with S2.
5	**COMPOSITE VIDEO IN/OUT connectors**	Input/output connectors for analog composite video signals.
6	**COMPONENT VIDEO IN/OUT connectors**	Input/output connectors for analog component video signals. **(*1)**
7	**DV connector (*2)**	Connect to DV connector on digital video camera.
8	**Fan motor**	Fan motor for cooling internal parts.
9	**LTC connector**	Connector for obtaining time code from VHS, VTR, etc.
10	**EXT SYNC IN and through Output connector**	Use for connecting external sync signal, and for pass-through signals.
11	**Terminate switch**	Use to terminate sync signal. Set to ON when used alone or when connected to a terminating unit.
12	**SIGNAL GND terminal**	Ground terminal for signals. When using the unit in environments exposed to high levels of electronic noise, malfunctions may occur to mouse and other control devices. In such cases, connect a ground wire between the components to reduce the noise. This is not an electric safety ground.
13	**REMOTE IN/OUT connectors**	~~Connect to external controller when desired for external control of unit.~~ The protocol is compatible with SONY format. **(*3)**
14	**PCM/DD DIGITAL OUT connector**	Digital audio output connector.
15	**ETHERNET connector**	Use for network connection.
16	**MOUSE/KEYBOARD connectors**	USB connectors for connecting mouse and keyboard, allowing external control of the unit. **(*4)**
17	**VGA (GUI) connector**	Connect to VGA monitor for expanded operation.
18	**UPS connector**	Connect when using UPS.
19	**Expansion slot**	Slot for use with expanded function boards.

***1** Inputs are compatible with signal levels for both BETA and SMPTE (see page 32 for selection methods). However, since outputs are based on DVD format, they differ from BETA and SMPTE levels. As a result, outputs should be used only for monitoring.

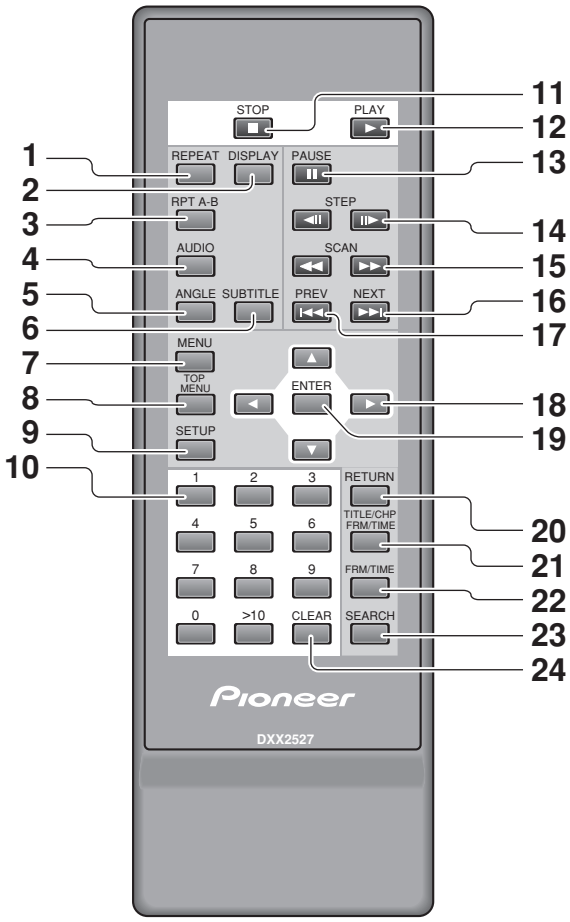
***2** LTC is not supported in drop frame mode.

***3** SONY is a trademark of Sony Corporation. TR

***4** Functionality is not guaranteed for all possible mouse/keyboards. If unstable operation is experienced, try reconnecting the USB connector. If operation continues to be erratic, consult your Pioneer dealer or one of the service centers listed at the end of this manual.

Remote Control Unit

- This remote control unit cannot be used for recording operations.



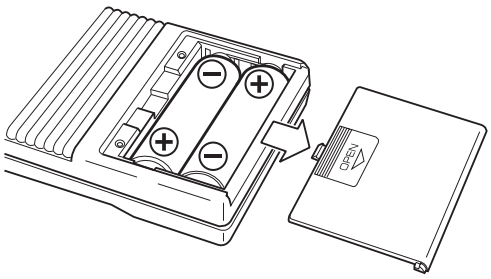
No.	Name
1	**REPEAT** button
2	**DISPLAY** button
3	**RPT A-B** button (repeat playback between two points)
4	**AUDIO** select button
5	**ANGLE** button
6	**SUBTITLE** button
7	**MENU** button
8	**TOP MENU** button
9	**SETUP** menu button ***1**
10	Number buttons (**0–9**, **>10**)
11	**STOP** button (■)
12	**PLAY** button (►)
13	**PAUSE** button (❚❚)
14	**STEP** / Slow buttons (◄❚❚, ❚❚►)
15	**SCAN** (fast forward/reverse) buttons (◄◄, ►►)
16	Chapter skip **NEXT** button (►►❙)
17	Chapter skip **PREV** button (❙◄◄)
18	Cursor buttons (▲, ►, ▼, ◄)
19	**ENTER** button
20	**RETURN** button
21	Title, chapter, frame, time button (**TITLE**/**CHP**/**FRM**/**TIME**)
22	Frame/time button (**FRM**/**TIME**)
23	**SEARCH** button
24	**CLEAR** button

***1** This key operates the same as the FUNCTION button on the main unit.

Load batteries into the remote control unit

Open the rear battery compartment cover and insert two AA batteries.

- Be sure to align the +/– polarities properly as shown.



Note:

- Do not mix new batteries with old.
- Even batteries of the same type may display different voltage characteristics. As a result, do not mix batteries of different brands together.
- If you do not plan to use the remote control unit for an extended period (one month or more), remove the batteries from the remote control unit to prevent potential damage from leakage of battery fluid. If battery leakage is discovered, remove and discard the batteries, and carefully wipe up any battery fluid from inside the compartment. Replace the old batteries with new.
- When disposing of used batteries, please comply with governmental regulations or environmental public instruction's rules that apply in your country or area.

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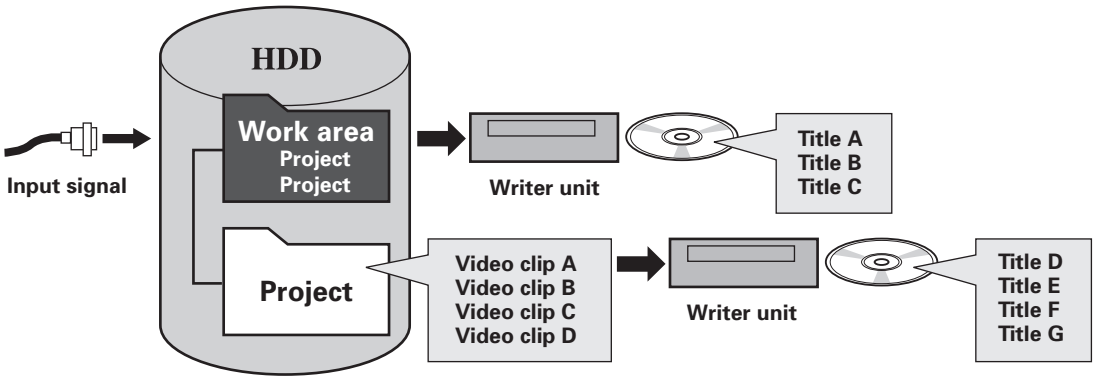
Range of Remote Control Unit

When pressing the remote control unit's buttons, point it toward the front-panel remote sensor. The range of the remote control unit is about 7 meters, within an angular range of 30° to either side of the front of the remote sensor.

- The remote control unit may malfunction if strong sunlight or fluorescent light is allowed to strike the remote sensor directly.

PRV-LX1 Video Clip Management and Disc Authoring Procedure

When recording to either disc or hard disk drive (HDD), the PRV-LX1 manages the video recording clips by units of "project." When creating a disc from clips recorded on HDD, this project unit is used to perform the disc recording.
A project is composed of individual recorded video clips (video data); while on the HDD, clips can be subjected to simple editing processes (trimming and chapter marking), and editing of the clip selections and their order can also be performed when recording from the HDD to DVD.



■ In principle, video data recorded in a unit lasting from REC start to REC stop is recorded on the HDD or DVD disc as a single unit called a video file (clip or title). Chapter marking can also be performed during recording.

■ **Following recording of the video signal, items which can be set or changed, together with disc production procedures, are noted below:**

When recording to DVD disc:

① **Settable items:**
- Disc menu setting
- Disc program setting

② **Disc creation flow:**
Video image recording → Disc setting → Finalize

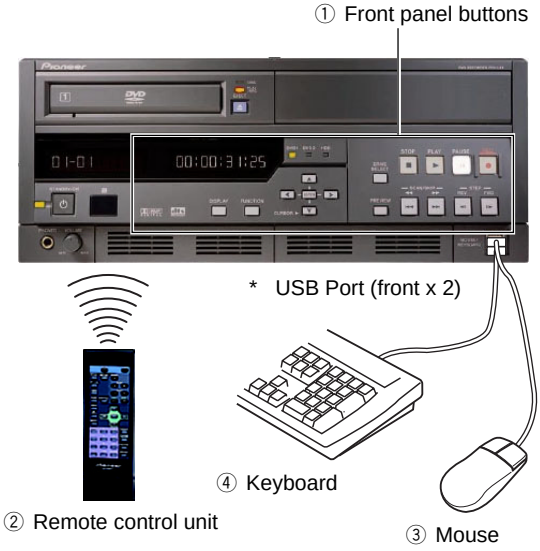
When recording to HDD:

① **Settable items:**
- Clip editing (chapter marking, trimming)
- Title selection (selection of clips and their order for recording to disc)
- Project copying, erasing
- Clip copying, erasing
- Disc menu setting
- Disc program setting

② **Disc creation flow:**
Video image recording → Clip editing → Disc setting → Recording to disc (including finalizing)

Basic PRV-LX1 Operations

[Operation]
Operatinal settings can be performed using the following methods:
1. Front Panel Buttons, 2. Remote Control Unit, 3. USB Keyboard, 4. USB Mouse



■

■ Operations Using a Mouse or Keyboard
A USB keyboard or mouse can be used to control the PRV-LX1. In addition, the keyboard's function keys can be programmed to perform system and function menu operations.

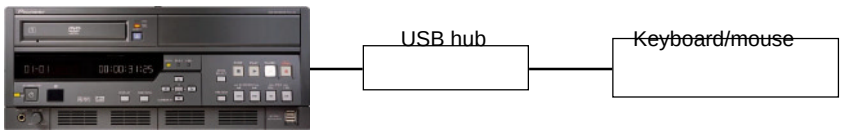
Note 2:
Mouse and keyboard are not provided and must be purchased separately.

Note 3:
Title text and other text inputs require the use of a keyboard. The purchase and implementation of a keyboard is recommended.

Note 4:
Certain special keys ("Play" etc.) found on commercially available keyboards cannot be used. The PRV-LX1 also does not support the use of the mouse wheel operation.

Note 5:
A connected keyboard or mouse may not be recognized during the power on and booting operation. In this event, try disconnecting and then reconnecting the mouse or keyboard. If the USB port cannot be accessed due to a rack mount installation, attached a USB hub to eliminate this symptom.

Note 1:
The remote control unit cannot be used to turn power ON/OFF or to perform recording operations.



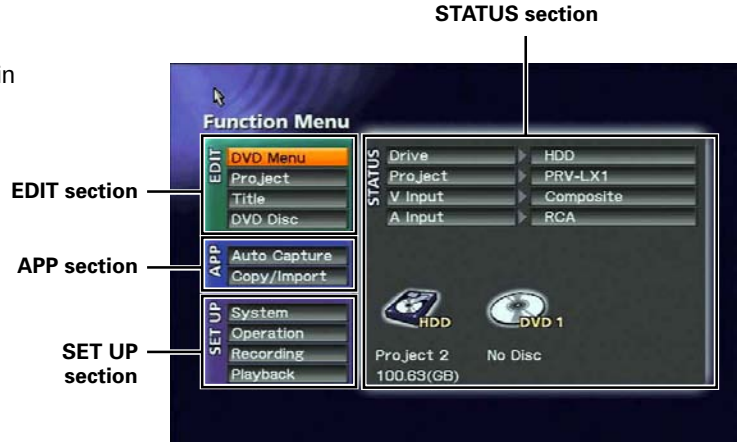
[Function Menu]

Operational settings are accessed via a dedicated graphical user interface (GUI) called the **"Function Menu"**.

The **Function Menu** is composed of a main menu for confirming current operating **STATUS**, together with the following three sub-sections:

① **EDIT**: items related to recorded video data and DVD settings.
② **APP (Application)**: file duplication, file importing, and batch programs for auto-capture.
③ **SET UP**: basic unit settings.

Each of these sections is composed of further sub-menus.



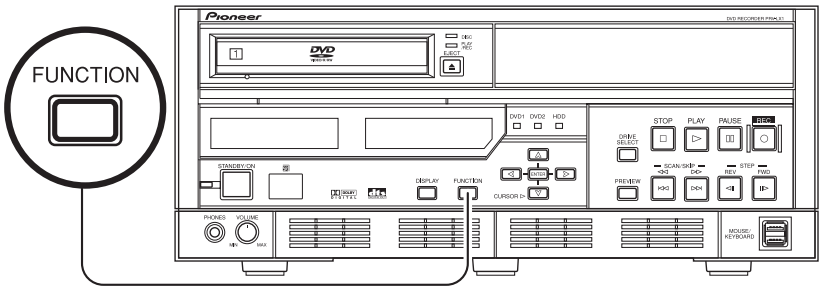
Function Menu (Top Menu)

Function Menu
(SET UP section → [Operation] → [Video Setting] → [Background Color])

■ How to Access Function Menu

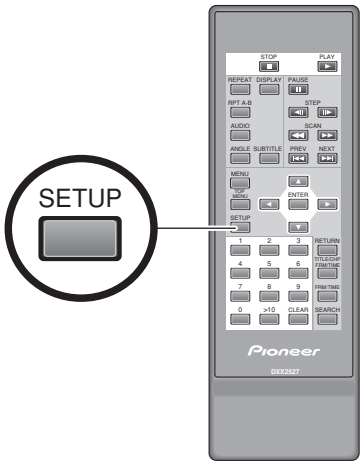
Use the following method to display the **Function Menu** (overlaid on the current Video signal):

① Press the FUNCTION button on the main unit's front panel.

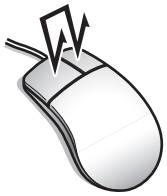


This product includes FontAvenue® fonts licenced by NEC Corporation.
FontAvenue is a registered trademark of NEC Corporation.

② **Press the SETUP button on the remote control**



③ **Use the mouse to display and access the playback control bar.**



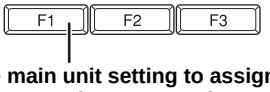
Press both right and left mouse buttons simultaneously.

Control bar is displayed.

Press the FUNCTION button to access the function menu

Move the mouse cursor over the FUNCTION button and click the left mouse button.

④ **Access from the Keyboard by Assigning a Function key.**



Use main unit setting to assign FUNCTION button to F1 key.

Function Menu appears when F1 key is pressed.

■ To Exit the Function Menu

Use either of the following methods:

① Press the **Exit** button found on any of the sub-menus (move mouse cursor over the **Exit** button and press the left mouse button).
② Press the **FUNCTION** button on the front panel.
③ Press the **SETUP** button on the remote control.
④ Click the right button on the mouse **(Note 6)**.
⑤ If the **Function Menu** has been assigned to a function key on the keyboard, press that key.

Note 6:
Use of the right mouse button to exit the **Function Menu** is supported only during display of the main Function menu.

■ Control Bar

The control bar is displayed by simultaneously pressing the right and left mouse buttons. When the control bar is displayed, simultaneously pressing the right and left mouse buttons again will cause the control bar to be hidden. When the mouse cursor is moved over the control bar, the cursor pointer arrow changes to a hand. When the hand is displayed, it can be used to perform the same operations available with the remote control unit; move the hand over the desired item and select by clicking the left mouse button.
The position of the control bar can be changed by placing the mouse cursor on the left edge and dragging. **(Note 7)**

Note 7:
The movable range of the control bar is limited to the area not overlapping the OSD display. Also, the new location of the control bar is reset once the **Function Menu** is exited.

PRV-LX1 Functions

[Main Unit Setting Functions]

■ **System Settings (Operation Details: page 29)**

- These items allow settings for mouse and keyboard, function button assignments, network settings, and other defaults. System information and hard disk drive refresh can also be performed here.

① **System Setting:** Use to perform settings including keyboard, mouse, and main unit clock.
② **F-Key Set:** Use to assign unit functions to the function keys of a keyboard.
③ **Network:** Use to perform network settings (when an optional network is installed).
④ **UPS Setting:** Use to perform settings when connected to a designated uninterrupted power system (UPS).
⑤ **Information:** Display system information.
⑥ **HDD Tools:** Use to erase user data and perform file system checks on the hard disk drive.

Note 1:
A mouse and keyboard are not included. Most commercially available mouses and keyboards (with USB connector) may be used.

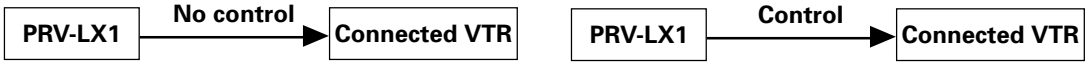
Note 2:
When connecting a UPS, please purchase the Smart-UPS 700VA (SU700NET) manufactured by AMERICAN POWER CONVERSION CORP. (APC).

■ **Operation Settings**

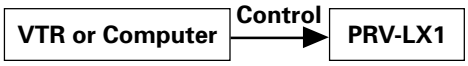
- Use to make settings required when connecting the PRV-LX1 to other components, and to perform operation settings.

① **Control Setting:** Settings required when connecting this unit to a source component (page 38).

*** Example of connections with local settings**



*** Example of connections with remote settings**



Note 3:
Some control functions may not be supported depending on the component connected. Check Pioneer's website for a list of components with confirmed operation compatibility.

② **Video Setting:** Use to perform settings for Video and OSD output (page 48).
③ **HDD Recording:** Use to enable/disable settings for time-shift recording (page 45).
④ **GUI Control:** Set GUI display language (page 50).

Note 4:
When the GUI language is set to Japanese the information area and dialogue displays are shown in Japanese. Japanese language input is also supported.

[Recording Functions] (Operation Details: page 32)

- This unit is equipped with the following connectors: composite video, S-video, DV, RCA audio, component video and XLR audio. RS-422A, DV, and LTC (linear time code) connectors can be used to support recording compliant with time code information.
  Note: LTC time code is intended for Japanese prosumer decks with the LTC feature.
- Video and audio inputs can be recorded to HDD, DVD-R/RW media or both simultaneously while automatically being converted to data complianwith the DVD-Video format.
- During recording, manual chapter setting can be performed, as well as automated chapter insertion at 3, 5, or 10 minute intervals.

Notes :

▼ Playback video/audio signals are delayed approximately 4 seconds from the input signal due to time required for encoding and decoding.
▼ Recording will not begin when copy guard protected signals are input.
▼ When DVD drive is selected as the recording destination, the **EJECT** button is disabled during use of the preview function.
▼ When recording to DVD media, at the end of a recording, from several to several dozen seconds will be required to complete the disc writing process. If an attempt is made to restart recording during this period, the actual recording cannot begin until the disc writing process is completed.
▼ Up to 99 chapter marks can be designated per title (clip); regardless of the insertion method, however, no more than 99 chapters can be inserted.
▼ When chapter marks are inserted by pressing the **Enter** key on a keyboard, if the **Enter** key is held depressed, multiple consecutive chapter marks may be inserted.
▼ The external VTR units compliant with the IEEE1394 standards supported by this unit are expected to be professional VTR components. Ordinary home-use VTRs which do not support IEEE1394 search commands cannot be used for automatic recording.
▼ Chapter mark positions are inserted in units of 15 frames.
▼ When using the Edit List (EDL) function, at the final IN/OUT point setting, the **APP** section → **[Auto Capture]** → **[IN/OUT Point]** → **[Record As]** command must be set to **"Title (Stop)"**.

[Play Functions] (Operation Details: page 41)

- Perform playback of clips recorded on DVD-Video discs or in projects recorded on hard disk drive, with video/audio being output to all output connectors.
- During recording to hard disk drive, time shift playback can be used to preview the recorded contents from beginning.

Notes :

▼ When using DVD-Video time search, playback may begin at a point somewhat shifted from the actually designated time number.
▼ Depending on the structure of the DVD-Video used, some errors may occurs when time search is performed for time numbers located in a range extending from several frames before to several frames after the divisions between titles and chapters.
▼ Single frame reverse and slow reverse playback are not supported during DVD-Video playback.
▼ When DTS audio is selected on DVD media recorded with DTS sound, no sound will be heard from analog outputs.
▼ When a copy-protected DVD media is played back, if recording is performed, no signal will be output to DV, even if DV output is set to **"Enabled"**.
▼ During time shift playback, the **PLAY** button enable start time will differ depending on the rate and the VOB length for each audio encoding format.
▼ For proper operation this must should be connected to a television monitor supporting progressive scan. Non-progressive-scan monitors will not display proper video images.

PRV-LX1 Functions

[Editing Functions] (Operation Details: page 56)

- When recording to the hard drive each video data (clips) can be assigned an independent name. Clips can also be edited including chapter deletion/insertion, cropping and title order.
- DVD disc emulation can be performed to confirm the results of editing on hard disk drive.

Notes :

▼ To change clip names connect a keyboard to the **MOUSE/KEYBOARD** USB port.

▼ Clip edits are performed directly on the selected clip(s). Once edited, the newly edited clips cannot be returned to their original state. When the original clip must be preserved, it (or the entire project) should be copied to a new project. Clip edits should then be performed on the new project or copy.

▼ Chapter mark positions are inserted in units of 15 frames (beginning of each GOP).

▼If you plan on writing your project to DVD, make sure that the total size of your edited project is 4.7GB or less so that it will fit on a DVD-R/RW disc.

▼ Single frame reverse and slow reverse playback are not supported during DVD disc emulation.

[Authoring Functions] (Operation Details: page 50)

- This unit includes several DVD menu templates that can be used to associate chapters or titles to buttons for DVD disc navigation.
- Pre and post command settings are available including a first play program to designate what scene or menu is displayed when a DVD is inserted into a DVD player, and a title post command to designate operations following title playback (go to next title or go to a DVD menu).

Notes :

▼ The Japanese font used is Mincho-tai. When Japanese input is set to OFF, input characters will appear in the font selected with the font setting.

▼ The menu screen supports only a 4:3 aspect ratio. As a result, when a menu background image or thumbnail is extracted from a title recorded in 16:9 aspect ratio, the image will appear vertically elongated.

[Copy/Import Functions] (Operation Details: page 62-63)

- Disc duplication operations have been optimized by the provision a 4x high-speed (maximum) duplication function.
- In addition to recording from hard disk drive to DVD-R/RW media, an optional DVD-R/RW writer can be added to allow duplication between DVD-R/RW discs or simultaneously from the hard drive to both writers.
- DVD menu layout and DVD menu background image files can be imported to the template library using a CD/DVD disc or an FTP connection from a computer connected to an online network.
- Edit decision lists (EDL) can also be downloaded and imported via a CD/DVD disc or an FTP connection from a computer connected to an online network.

Notes :

▼ Only one image file at a time can remain on the hard drive. If a new image file is copied to the hard drive, the previous image file will be overwritten.
▼ Image files exceeding 4.7 GB cannot be copied to disc.
▼ The time required for disc copying will differ depending on the source disc's record and read performance.
▼ Discs with copy-prohibited contents cannot be copied. When this unit is used to record copyrighted material, the permission of each copyright holder and neighboring rights holder must be obtained. Failure to obtain the permission of each rights holder can be punishable by law. Pioneer disclaims any and all responsibility for any trouble arising between the user of this device and any such rights holders as the result of recording of copyrighted materials.

Status Confirmation Using Onscreen Display (OSD)

Pressing the **DISPLAY** button on the unit's front panel or on the remote control unit will activate the onscreen display (OSD). The OSD permits confirmation of the unit's current setting status and recording/playback conditions.

■ **Idling Condition Recording-Setting Confirmation Screen**

Pressing the **DISPLAY** button when the unit is in the idling condition displays a listing of the unit's current **Status** (settings). This allows the user to check settings before operating the unit without the need to enter the **Function Menu**.

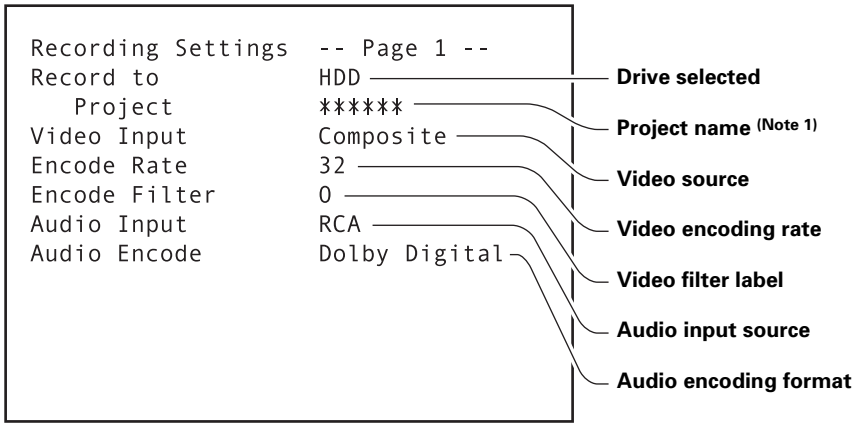
When the unit is in the idling condition, the OSD screen is composed of two pages. The first two times the **DISPLAY** button is pressed, the OSD alternates between the two pages. When the DISPLAY button is pressed a third time the OSD is turned off.

Main unit button

DISPLAY

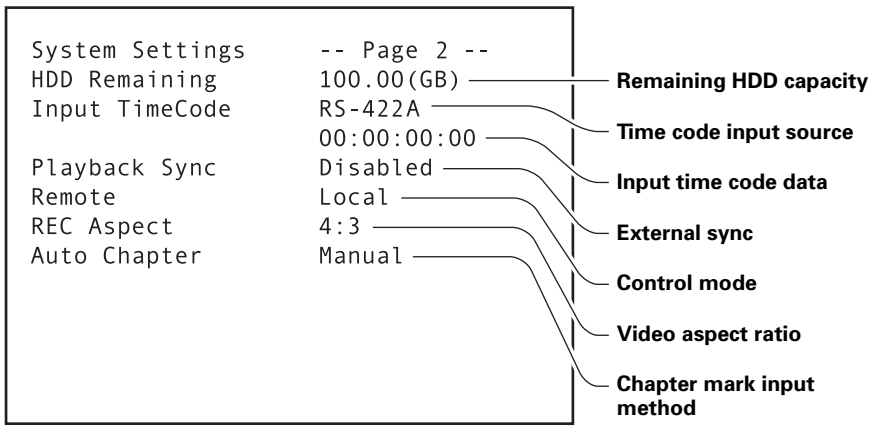
Remote control unit

DISPLAY



OSD Page 1

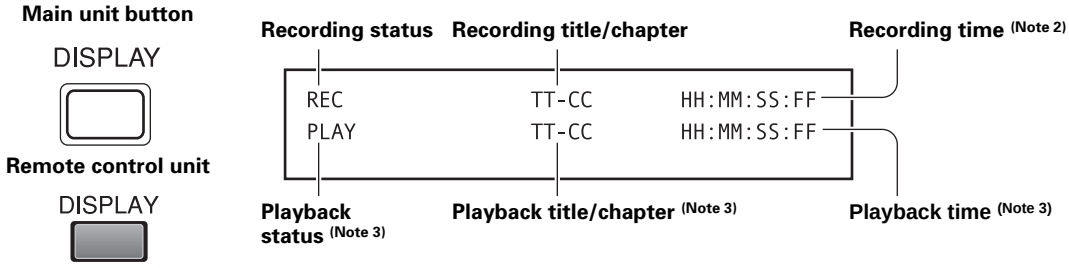
Note 1:
When the destination drive is DVD, the project name is not displayed.
Project names are displayed only when HDD is designated as the destination drive.



OSD Page 2

■ OSD during Recording

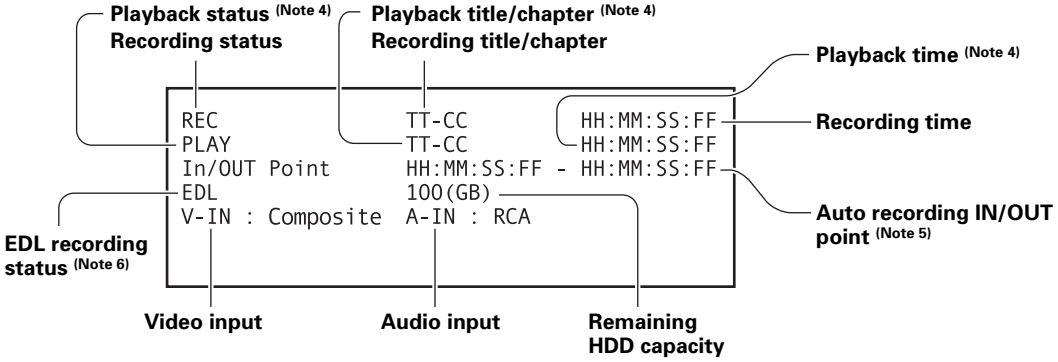
When the **DISPLAY** button is pressed during recording, the OSD displays the unit's recording status and playback condition (during time shift recording).
In the recording mode the OSD screen is composed of two pages, a simple (reduced clutter) page and a detailed information page. The first two times the **DISPLAY** button is pressed, the OSD alternates between the two pages. When the button is pressed a third time the OSD is turned off.



OSD during Recording (page 1)

Note 2:
TR I

Note 3:
Playback status is shown only during time shift recording.



OSD during Recording (page 2)

Note 4:
Playback status is shown only during time shift recording.

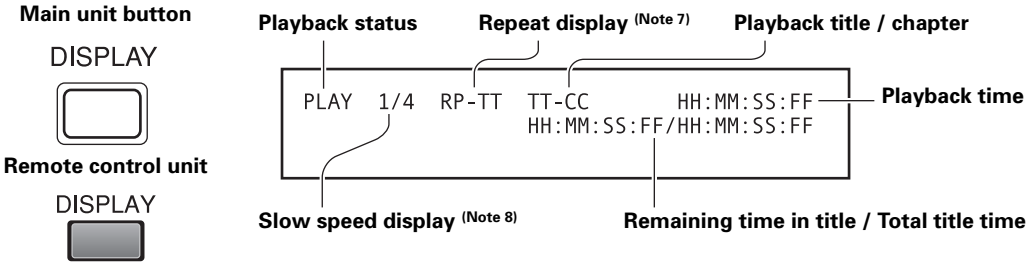
Note 5:
IN/OUT points are displayed only during auto-recording and EDL recording.

Note 6:
EDL numbers are displayed only during EDL recording.

Status Confirmation Using Onscreen Display (OSD)

■ OSD during Playback

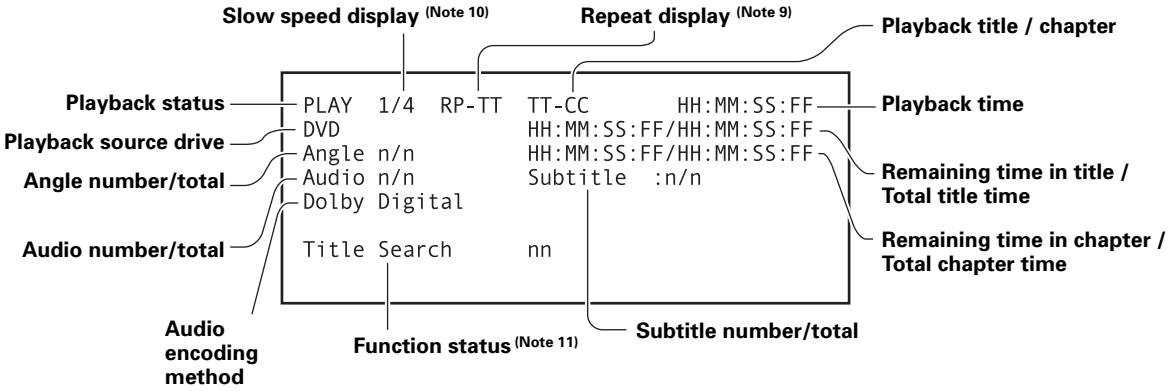
When the **DISPLAY** button is pressed during playback, the OSD displays the unit's playback status. In playback mode, the OSD screen is composed of two pages, a simple (reduced clutter) page, and a detailed information page. The first two times the **DISPLAY** button is pressed, the OSD alternates between the two pages. When the **DISPLAY** button is pressed a third time, the OSD is turned off.



OSD during Playback (page 1)

Note 7:
Displayed only during repeat play

Note 8:
Displayed only during slow speed operation



OSD during Playback (page 2)

Note 9:
Displayed only during repeat play

Note 10:
Displayed only during slow speed operation

Note 11:
Displayed during angle, audio, subtitle change, and during search operations.

System Default Settings

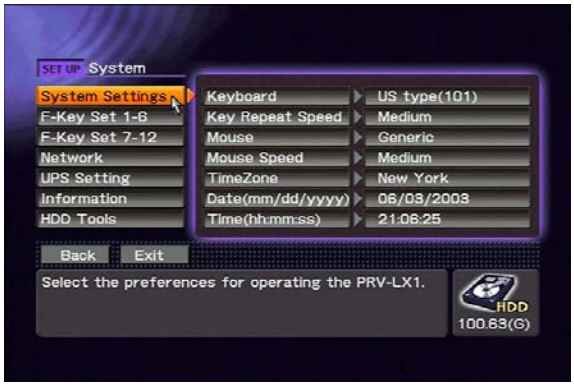
To modify initial default settings for the PRV-LX1 enter the Function Menu and select [System] located under SET UP.

Mouse/Keyboard

This DVD recorder supports the use of a mouse and keyboard. The types of mouse and keyboard supported are as follows:

Mouse: Generic
Keyboard: US type (101-key)
Japan type (106-key)

To set the keyboard type, go to **SET UP** section → [**System**] → [**System Settings**] → [**Keyboard**].



SET UP section → [System] → [System Settings]

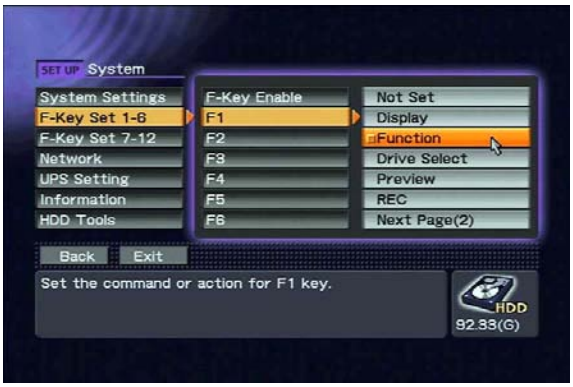
The **[System Settings]** command also allows selection of mouse cursor movement speed, keyboard key repeat speed, time zone and date/ time.

SET UP section → [System] → [System Settings] → TimeZone setting

Programming the Function keys:
To facilitate operation of the unit, the **SET UP** section → [**System**] → [**F-Key Set**] command allows you to program your keyboard's 12 function keys (**F1**-**F12**) to perform the equivalent functions of front panel controls. The function keys can also be combined with **Ctrl** and **Shift** keys to provide additional programming combinations.

SET UP section → [System] → [F-Key Set 1-6]

SET UP section → [System] → [F-Key Set 1-6] → F-key Enable setting

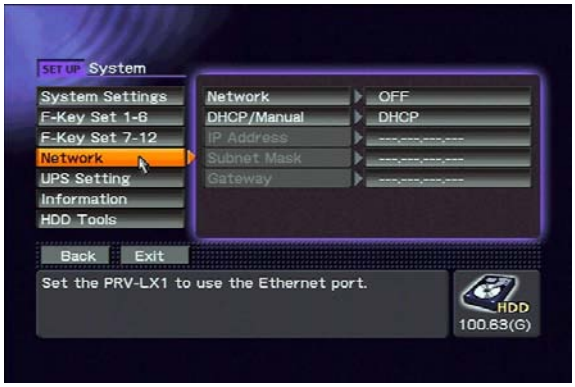


SET UP section → [System] → [F-Key Set 1-6] → F1 setting

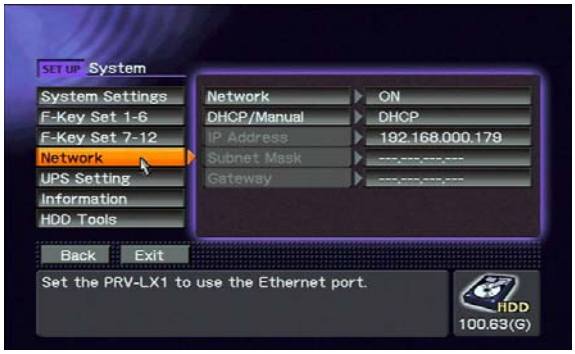
Network

When using this unit on a network, go to **SET UP** section → [**System**] → [**Network**], and set the [**Network**] command to **"ON"**. Then go to **SET UP** section → [**System**] → [**Network**], and set the [**DHCP/Manual**] command either to use DHCP (Dynamic Host Configuration Protocol) or input the IP address used, together with sub-net mask and Gateway address.

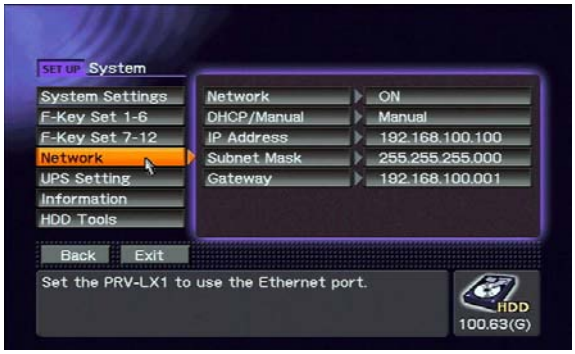
If **"DHCP"** is selected, confirm that a DHCP server in fact exists. If no server exists, a longer time will be required for the unit to boot to the idling condition when the power is turned on. When **"DHCP"** is selected, the [**IP Address**] command will display the address automatically allocated to the recorder.



SET UP section → [System] → [Network]



SET UP section → [System] → [Network] → [DHCP/ Manual] → [DHCP]



SET UP section → [System] → [Network] → [DHCP/ Manual] → [Manual]

Note:

Be very careful when setting IP address, sub-net mask, and Gateway addresses. Failure to set the correct values may not only make it impossible to connect to a network, but cause malfunctions throughout the network. If you are unsure of the proper values to set for these items, consult your network administrator.

UPS Support

Whenever the power to this unit is turned OFF, the unit performs a shutdown operation. An unintentional power interruption can result in the power being disconnected without the shutdown operation being performed thus possibly causing malfunctions. In order to avoid such malfunctions, we recommend adding an uninterrupted power supply (UPS) to your system.

By going to **SET UP** section → [**System**] → [**UPS Setting**] → [**Model**], you can select **APC Smart-UPS 700** or **Smart-UPS 500** **(Note)**.

Note:

Smart-UPS 500 is for use in Japan only. Also, if the power is interrupted when a UPS is connected, the time before automatic shutdown is initiated can be set to 30 seconds or 60 seconds (**SET UP** section → [**System**] → [**UPS Setting**] → [**Shutdown Delay**]). In this way, the shutdown operation will be avoided if normal power is restored within the selected time interval.

SET UP section → [System] → [UPS Setting]

Use the UPS products below, manufactured by AMERICAN POWER CONVERSION CORP. (APC).

Smart-UPS 700VA
(Part Number: SU700NET)

Connection of other manufacturers' UPS still works, but does not communicate directly with the PRV-LX1. When connecting this unit to the UPS, always use the cables supplied with the UPS unit.

Before using the unit with a UPS, be sure to consult the operating instructions accompanying the UPS product.

System Information

Go to **SET UP** section → [**System**] → [**Information**] to confirm the following system information:

System version (application version / OS version)
Total power-on time (hours)
Hard disk drive (HDD) access time (hours)
DVD-R/RW Drive read/write time (hours)

SET UP section → [System] → [Information]

HDD Tools

At **SET UP** section → [**System**] → [**HDD Tools**], functions are provided for formatting and file checking the video recording area of the built-in hard disk drive.

Note:

When **Format** is selected, all projects will be erased. The Format command erases even those clips in projects which have been set for accidental erasure protection using the **EDIT** section → [**Project**] → [**Record/Name**] → [**Protect**] command.

SET UP section → [System] → [HDD Tools]

Background Color

Go to **SET UP** section → [**Operation**] → [**Video Settings**] → [**Background Color**] to select either black or blue as the background color when the unit is in the idling condition.

SET UP section → [Operation] → [Video Settings] → [Background Color]

Composite/RCA Output

Video output on this unit can be set to either composite output, RCA output only, or pass-though of the input signal.

Use the **SET UP** section → [**Operation**] → [**Video Settings**] → [**Composite OUT**] command to select **"Source Monitor"**.

SET UP section → [Operation] → [Video Settings] → [Composite OUT]

Note:

When set to **"Source Monitor"** (pass-through output), the output will switch to **"Decoder Out"** if the OSD is turned on.

Recording

The recording function involves inputting video/audio signals from a VTR or other similar video playback device (“external VTR”), converting those signals to data compatible with the DVD video format and recording the data to the HDD or to disc. The data from the hard drive is then recorded to a DVD-R/RW disc. A playback video/audio signal is simultaneously output. If the SET UP section [Operation] → [Video Settings] > [Composite OUT] is set to “Source Monitor”, the input image will be passed through during recording as well (see page 31). In addition, in the event this command is set to “Decoder Out”, the output signal will be the encoded/decoded version of the original input video/audio signal.

Note 1:
The playback video signal is delayed about 4 seconds with respect to the input signal due to the time required for encoding and decoding.

Note 2:
Recording will not begin if a copy-guard protected input signal is detected.

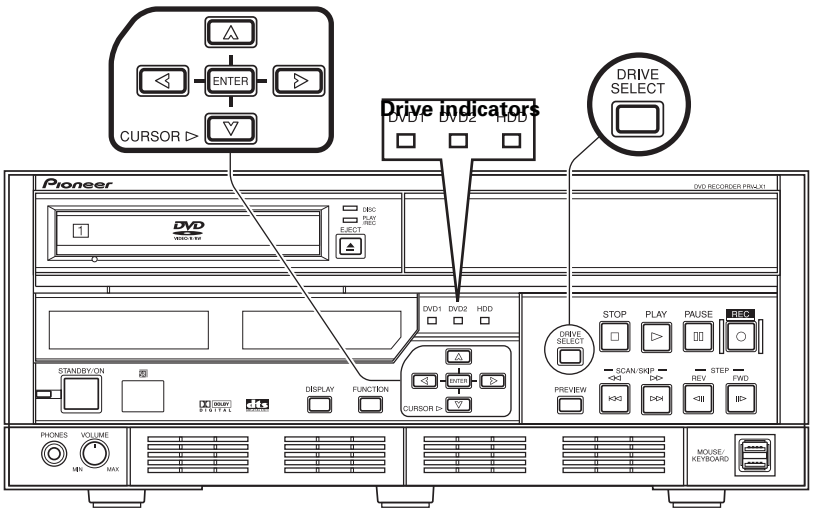
Note 3:
When set to “Source Monitor” (pass-through output), the output will switch to “Decoder Out” if the OSD is turned on.

Selecting Input

On the **Function Menu**, the **STATUS** section → [**V Input**] and [**A Input**] commands indicate the currently selected video and audio input signals. Use the **CURSOR** and **ENTER** buttons to change to the connectors for different input signals if desired. Also, when **“DV”** is designated for [**V Input**] or [**A Input**], both [**V Input**] and [**A Input**] are set to **“DV”**.

STATUS section → [V Input]

STATUS section → [A Input]



Selecting Recording Destination

The currently selected recording destination (also the playback source) will be displayed on the front panel's central indicator (**DVD1**, **DVD2**, **HDD** indicator). The [**Drive**] command on the **Function Menu**'s **STATUS** section also indicates the currently selected recording destination/playback source. Use the front panel's **DRIVE SELECT** button, or the [**Drive**] command in the **Function Menu**'s **STATUS** section to select the recording destination. However, note that the **DRIVE SELECT** button is disabled during display of the **Function Menu**.

When "**HDD**" is selected, recording is performed to the HDD only. If only one DVD-R/RW drive is installed, "**DVD1**" is selected; if two drives are present, the recording destination can be "**DVD1**" only, "**DVD2**" only or both drives "**DVD1&2**".

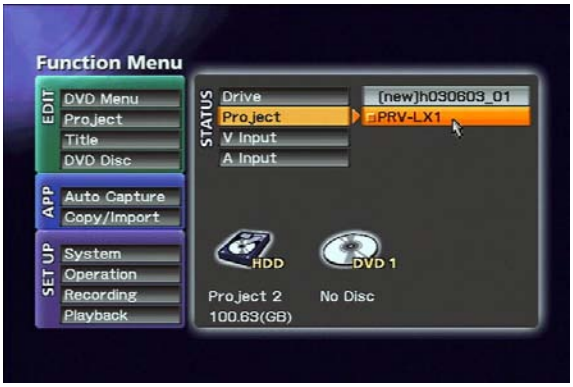
STATUS section → [Drive]

STATUS section → [Drive]
(with expansion DVD drive)

When **"DVD & HDD"** are selected with the **Function Menu**'s **EDIT** section → [**Project**] → [**Record/Name**] → [**Record To**] command, recording is performed to both hard disk drive and DVD simultaneously, and the recording remains stored on the hard disk even after the DVD is finalized and removed from the drive.

EDIT section → [Project] → [Record/Name] → [Record To]

When recording to hard disk drive, this recorder performs internal management of recorded data (clips) in units called "projects." Multiple clips (up to a maximum of 255) can be recorded in a single project, and so long as a project is not changed, clips can be recorded continuously within a single project. When you wish to classify your recorded data in multiple groups, change the project by using the [**Project**] command on the **STATUS** section, and continue recording.



STATUS section → [Project]

Other Recording Settings

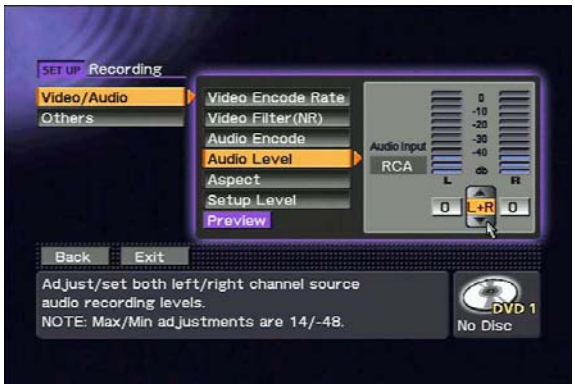
Function Menu's **SET UP** section → [**Recording**]:
This command also allows the following settings:

Video Encode Rate:	32 levels
Video Filter (NR):	16 levels
Audio Encode:	Dolby Digital / LPCM
Audio Level:	–48dB to +14 dB
Aspect:	4:3 / 16:9
Setup Level:	0 IRE / 7.5 IRE
Auto Chapter:	Manual / automatic (at 3/5/10 minutes intervals)
REC Button:	REC Start / Standby → REC

SET UP section → [Recording] → [Video/Audio]

SET UP section → [Recording] → [Video/Audio] → [Audio Encode]

SET UP section → [Recording] → [Video/Audio] → [Video Encode Rate]



SET UP section → [Recording] → [Video/Audio] → [Audio Level]

SET UP section → [Recording] → [Video/Audio] → [Video Filter (NR)]

SET UP section → [Recording] → [Others]

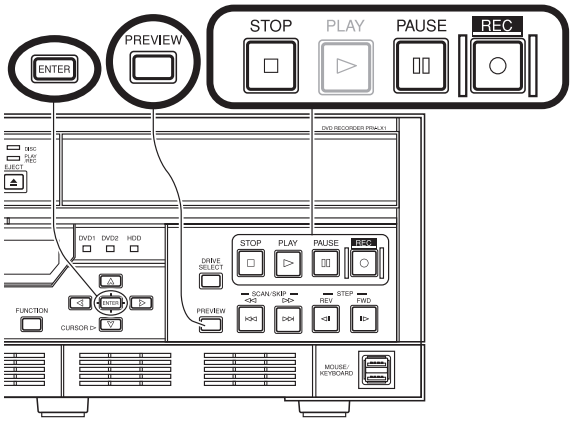
Preview Function

The front panel's **PREVIEW** button, or the **SET UP** section → [**Recording**] → **Preview** button can be used to confirm the results of encoding and decoding of the video/audio input signals.
In the idling condition, press either the **PREVIEW** button, or on the **Function Menu**'s **SET UP** section → [**Recording**] command, press the **Preview** button. The elected input preview image/sound (after encoding and decoding) will be produced at all output connectors. Also, while viewing the preview, if the **PREVIEW** button or the **STOP** button is pressed (or if the mouse's left and right buttons are clicked simultaneously), the unit will return to the idling condition or the **Function Menu**.

Note 1:
When DVD drive is selected as the recording destination, the **EJECT** button is disabled during use of the preview function.

Note 2:
Even if the **SET UP** section → [**Operation**] → [**Video Settings**] → [**DV OUT**] command is enabled, no signal is output from the DV connector during use of the preview function.

Executing Preview command on SET UP section → [Recording] → [Video/Audio]



Starting and Stopping Recording

Recording can be started and stopped either manually or automatically.
Recording automatically stops whenever the recording destination runs out of recording capacity. Also, recording will not start if the medium has no recording space available. When recording to DVD, recording will not begin after 99 titles have been recorded to a single disc, even if the disc has recording capacity remaining. When performing continuous recording to hard disk drive, a single clip can contain a maximum of 100 hours of recording time.

① Manual Recording

Starting and stopping manual recording is performed with the front panel's **REC** and **STOP** buttons. During recording, the **PAUSE** button can be pressed to temporarily interrupt the recording. From the pause mode, press **REC** button again to resume recording, and the recording will be a continuous part of the clip (title) begun before the pause. During recording, the front panel's **REC** button will light, and during the pause mode, both the **REC** and **PAUSE** buttons will light.
When manual chapter mark insertion is selected, chapter marks can be entered at desired locations by using the main unit's front panel **ENTER** button, the remote control unit's **ENTER** button, or the **Enter** key on a connected keyboard. A chapter mark is also inserted when the **PAUSE** button is used to set the unit to recording standby. If automatic chapter mark insertion has been selected, a chapter mark will be inserted automatically after each set interval. In this case, no chapter mark will be inserted at a recording pause position. The session from recording start to recording stop will be considered an independent title (clip).

Note 1:
When the **STOP** button is used to terminate recording, several seconds are required to completely stop the process after the button is pressed. The stop time is greater when recording to DVD than to HDD. Recording cannot be restarted until after this operation is completed. The **STOP** button flashes during the period after the **STOP** button is pressed and recording stops completely.

Note 2:
In theory, up to 99 chapter marks can be inserted for a single title (clip), but no more than that number can be inserted, no matter what method is used.

Note 3:
Be careful when using a keyboard to insert chapter marks, since if the **Enter** key is held depressed, multiple consecutive chapter marks may be inserted.

② **Automatic Recording**
RS-422A or IEEE1394 interface protocols can be used to control an external VTR or similar device and perform automated recording (see Pg 38).

■ **Recording Using IN/OUT Points Setting**
On the **Function Menu**'s **APP** section, use the [**Auto Capture**] → [**IN/OUT Point**] → [**IN/OUT Point**] command to set the time code for the IN and OUT points. When the **Function Menu**'s **REC** button is then pressed, the external VTR is automatically rewound to a position just preceding the selected IN point, and recording starts automatically from that point. When the designated OUT point is detected, the unit automatically enters the REC pause/stop mode.

APP section → [Auto Capture] → [IN/OUT Point] → [IN/OUT Point]

A 17 frame offset has been established as the default number of frames. In most cases this offset is correct. Should the recorded first frame of video not match the source **In** time code point. Adjust the offset frame number to set the correct time code point.

The preroll time preceding the IN point can be changed from between 1 to 10 seconds before the point by using the **Function Menu**'s **APP** section → [**Auto Capture**] → [**IN/OUT Point**] → [**Preroll Time**] command. The time code delay compensation (offset) can be set to from 0 to –30 frames by using the **APP** section → [**Auto Capture**] → [**IN/OUT Point**] → [**Offset (Frame)**] command.

Note:
Frame offset default is set at 17 frames. Accuracy during use of the auto-recording function is as follows:

SET UP section → [Operation] → [Control Settings] → [Time Code]	**Offset (Frame) value**
RS-422A	± 1 Frame
LTC	± 1 Frame
IEEE1394	± 1 Frame

In order to match the phase with the input time code, the preroll should be set to about five seconds. The preroll value must be corrected using the source side component.

APP section → [Auto Capture] → [IN/OUT Point] → [Preroll Time]

APP section [Auto Capture] → [IN/OUT Point] → [Offset (Frame)]

The **APP** section → [**Auto Capture**] → [**IN/OUT Point**] → [**Record As**] command allows designation of whether recording enters the REC pause mode, or stops completely when the OUT point is detected. When **"Chapter (Pause)"** is selected, the command also permits the insertion of a chapter mark at that point. When manual chapter mark insertion has been previously selected, optional chapter marks can be inserted by pressing the **ENTER** button during recording. When automatic chapter mark insertion has been selected, however, a chapter mark is inserted automatically at regular intervals; in this case, even if **"Chapter (Pause)"** is designated, no chapter mark will be inserted when the unit enters the REC pause mode. The session from recording start to recording stop will be considered an independent title (clip). During recording, the playback video/audio signal will be output, but when recording is completed, the screen will return to the **Function Menu** display.

APP section → [Auto Capture] → [IN/OUT Point] → [Record As]

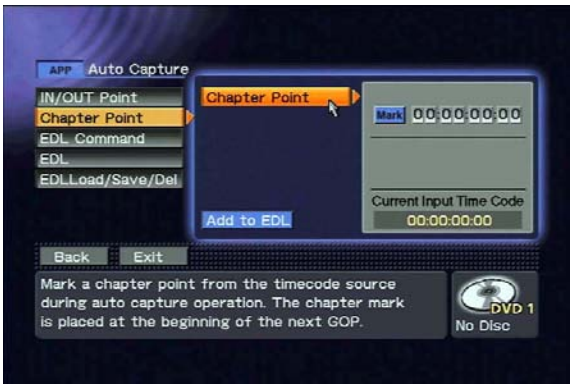
■ Edit List (EDL) Recording

The Edit List (EDL) function allows automated recording of consecutive multiple IN/OUT points by setting the points on an Edit List (EDL). This recorder allows formation of an Edit List by using the contents set with the **Function Menu**'s **APP** section → [**Auto Capture**] → [**IN/OUT Point**] command. By pressing the **Add to EDL** button, the IN/OUT points set are added to the edit list.

APP section → [Auto Capture] → [IN/OUT Point] Adding to EDL

After construction of an edit list, or after loading a previously recorded edit list, pressing the **Function Menu**'s **APP** section → [**Auto Capture**] → [**EDL Command**] → **EDL REC** button will cause recording to be performed automatically in accordance with the constructed list. In accordance with the recorded IN/OUT points, the external VTR is automatically rewound to the designated IN point, and recording begins automatically. When a designated OUT point is detected, the unit automatically enters the REC pause/stop mode.

By using the **APP** section → [**Auto Capture**] → [**Chapter Point**] command to record chapter point settings in an edit list, not only REC pause positions, but chapter marks can also be inserted at optional points.



APP section → [Auto Capture] → [Chapter Point]

The session from recording start to recording stop is considered an independent title (clip). During recording playback video/audio signals are output but when recording ends, the screen reverts to the Function menu. The final In/Out point must be recorded as "Title(STOP)" (see Pg 38).

Settings for Automatic Recording

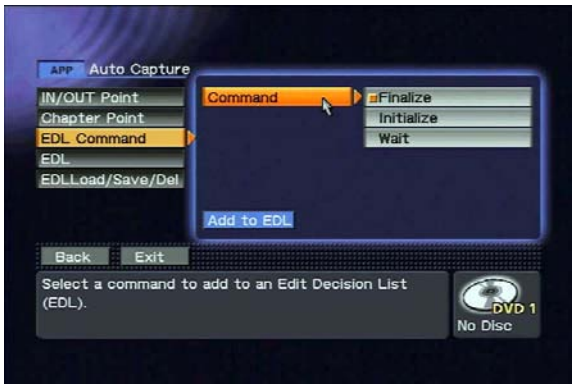
When using an external VTR with automatic recording, the **Function Menu**'s **SET UP** section → [**Operation**] → [**Control Settings**] command allows independent settings to be made for the command line and time-code acquisition for controlling the external VTR. To perform automatic recording, set the **SET UP** section → [**Operation**] → [**Control Settings**] → [**Control**] command to **"Local"**.
The **SET UP** section → [**Operation**] → [**Control Settings**] → [**Port**] command allows setting of the command line to **"RS-422A"** (or **"IEEE1394"**).
Use the **SET UP** section → [**Operation**] → [**Control Settings**] → [**Time Code**] command to set the time code line to either **"RS-422A"** or **"LTC"** (or **"IEEE1394"**). When **"DV"** is selected as input, the **"IEEE1394"** interface is added to the possible selections.

SET UP section → [Operation] → [Control Settings]

Note:
The external VTR units compliant with the IEEE1394 standards supported by this unit are expected to be professional VTR components. Ordinary home-use VTRs which do not support IEEE1394 search commands cannot be used for automatic recording.

Editing the Edit List

The contents that can be recorded on the edit list with this recorder are as follows:
The contents set with the **APP** section → [**Auto Capture**] → [**IN/OUT Point**] and [**Chapter Point**] commands are added to the edit list by pressing the **Add to EDL** button.
Also, the **APP** section → [**Auto Capture**] → [**EDL Command**] command can be used to add disc finalize and initialize commands and wait functions to the edit list as well. The wait function can be used to place EDL recording in REC pause mode when necessary, for example, to change the recording source's VTR tape during EDL recording.



APP section → [Auto Capture] → [EDL Command] → [Command]

Use the **APP** section → [**Auto Capture**] → [**EDL**] command to perform editing of recording items on the edit list (deleting, changing order of steps).

APP section → [Auto Capture] → [EDL]

In particular, the contents set with the **APP** section → [**Auto Capture**] → [**Chapter Point**] command must be recorded as the next step after setting and recording the IN/OUT points where you wish to insert chapter marks.
If chapter points are set and recorded after earlier setting and recording multiple IN/OUT points, the chapter points will be added as an additional record at the end of the edit list, and thus must be changed to their proper order.

Note:
When recording the edit list, the final IN/OUT point setting must be as follows: **APP** section → [**Auto Capture**] → [**IN/OUT Point**] → [**Record As**] command must be set to **"Title(Stop)"**.

APP section → [Auto Capture] → [EDL] items editing (example 1)

APP section → [Auto Capture] → [EDL] items editing (example 2)

After constructing an edit list, it can be saved it by using the **APP** section → [**Auto Capture**] → [**EDL Load/Save/Del**] → [**Save**] command. Also, a saved list can be selected and loaded by using the **APP** section → [**Auto Capture**] → [**EDL Load/Save/Del**] → [**Load**] command. To delete a selected list, use the [**EDL Load/Save/Del**] → [**Delete**] command.

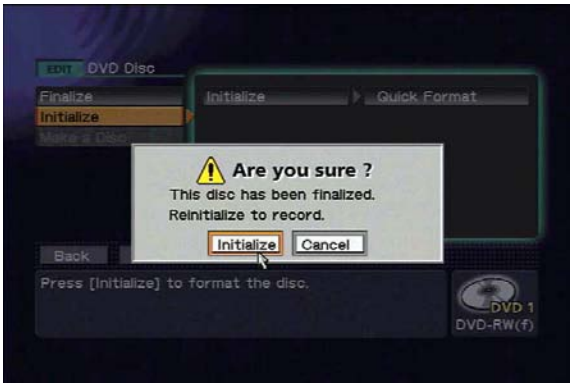
APP section → [Auto Capture] → [EDL Load/Save/Del]

Note:
Edit lists can be composed outside of the recorder and imported (see page 63 **"Inporting Image Data, Edit Lists"**).

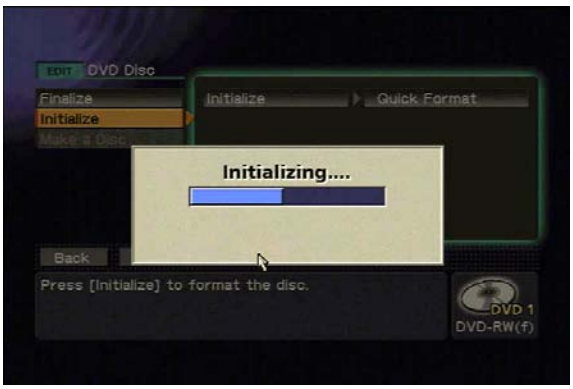
Recording to DVD Discs

An unused DVD-R disc or DVD-RW disc can be used. When using a DVD-RW disc that has been previously used, it is necessary to initialize the disc again, using the **Function Menu**'s **EDIT** section → [**DVD Disc**] → [**Initialize**] command. You can choose either Quick Format or Full Blank (all previously recorded material is erased). Note that Full Blank format requires from 30 minutes to 1 hour to complete.

EDIT section → [DVD Disc] → [Initialize] → [Initialize]



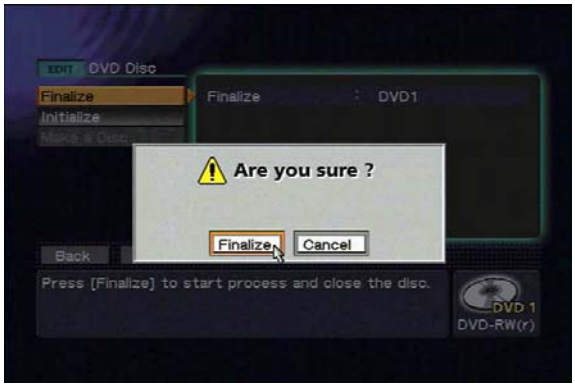
Initialize confirmation dialog



Initialize progress bar (appears during initialization)

Following recording, DVD discs must be closed to further recording by using the **EDIT** section → [**DVD Disc**] → [**Finalize**] command. Discs which have been recorded but not finalized cannot be removed. During recording, if an attempt is made to use the **EJECT** button to remove an disc that hasn't been finalized, or to change the drive selection from **DVD**, a dialog will appear instructing the user to either finalize the disc or cancel. If cancel is selected, the display will return to the **Function Menu**.

EDIT section → [DVD Disc] → [Finalize]



Finalize confirmation dialog

Finalize progress bar (appears during finalization)

Note:
If the command is input to move to the standby condition during recording to a DVD disc, or following recording when finalization is not performed:
① DVD-R disc: Cannot be recorded further.
② DVD-RW disc: Caution is required, since the disc can still be used if initialized. Since projects are preserved on hard disk drive, it is possible to use the **EDIT** section → [**DVD Disc**] → [**Make a disc**] command to rerecord the disc.

Recording from HDD to DVD

Following recording of a video program to the hard disk drive, editing of the DVD menu and title can be performed before final recording to DVD disc. To record in this way, use the **EDIT** section → [**DVD Disc**] → [**Make a Disc**] command. The destination drive for final recording can be selected by using the **EDIT** section → [**DVD Disc**] → [**Make a Disc**] → [**Target**] command, and specified as either **"DVD1"**, **"DVD2"**, or **"DVD1&2"**.

Note:
The total post-editing program size must be within the capacity of the DVD disc or recording will not be possible.

EDIT section → [DVD Disc] → [Make a Disc]

Note:
TR J

Playing Discs

When playing discs on this unit, the program on a loaded DVD-Video disc, or the clips recorded as a project on the hard disk drive are played back and the video/audio signals output to all output connectors. However, when playing DVD-Video discs equipped with copy-guard copy protection, playback signals will not be output to the DV connector nor to other digital video output connectors.

Selecting Playback Source

The currently selected playback source (also the recording destination) will be displayed on the front panel's central indicator (**DVD1**, **DVD2**, **HDD** indicator). The [**Drive**] command on the **Function Menu**'s **STATUS** section also indicates the currently selected recording destination/playback source. Use the front panel's **DRIVE SELECT** button, or the [**Drive**] command on the **Function Menu**'s **STATUS** section to select the recording destination.

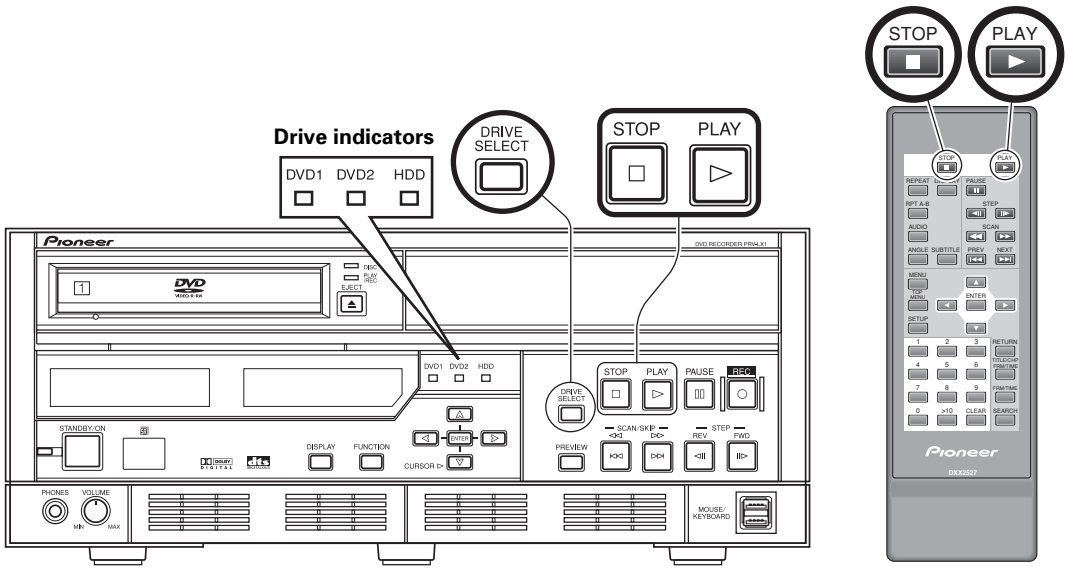
Playing DVD-Video Discs (including commercially available software titles)

Begin playback of a DVD disc inserted in the currently selected drive by pressing the **PLAY** button on the front panel or remote control unit. Stop playback by pressing the **STOP** button on the front panel or remote control unit.
If a mouse is installed, play can also be controlled from the playback control bar displayed by simultaneously pressing both buttons of the mouse.

STATUS section → [Drive]

STATUS section → [Drive] (with expansion DVD drive)

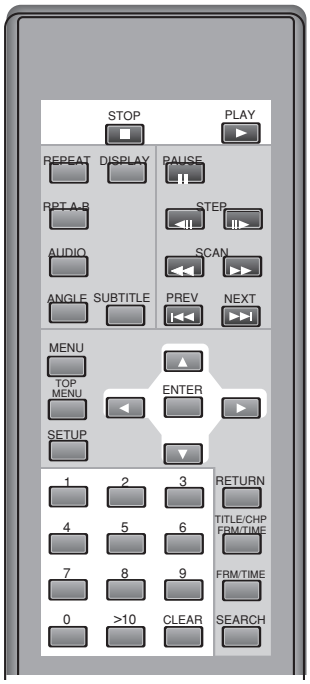
Playback control bar



When a DVD disc has been set for fast play, follow the instructions to begin playback automatically upon insertion of the disc. When **"DVD1"** or **"DVD1&2"** is designated, **"DVD1"** is used. To playback discs on drive 2, **"DVD2"** must be designated as the playback source. During playback, controls on the front panel and remote control unit act to navigate the DVD in accordance with the disc's commands.

Clip Playback (HDD)

When the **"HDD"** is designated as the playback source, the **PLAY** button on the front panel or remote control unit is used to playback designated project clips in the order in which they were recorded. Press the **STOP** button on the front panel or remote control unit to end playback.



Basic Operations

■ **Operations on the Menu Screen**

Some DVD-Video discs are equipped with menu (selection screen) functions. To select desired titles and tracks from the menu, use the PRV-LX1's **CURSOR** button to select, and the **ENTER** button to confirm the selection.

■ **To return to the menu screen during playback**

Press the TOP MENU button.

Also, if the MENU button is pressed, the menu screen within the current title will appear.

■ **To advance to the next chapter/title**

Press the main unit's **SCAN/SKIP FWD** button, or the remote control unit's NEXT button; the playback will advance immediately to the beginning of the next chapter or title.

■ **To go back to previous chapter/title**

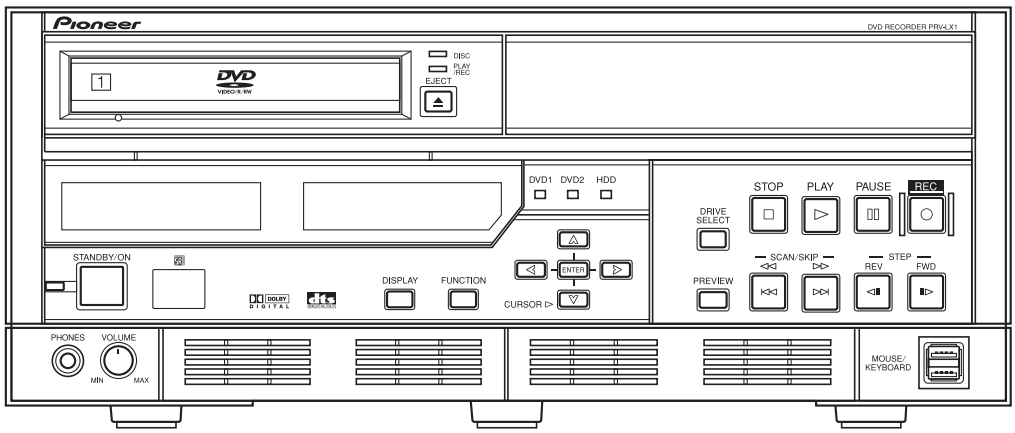
Press the main unit's **SCAN/SKIP REV** button, or the remote control unit's PREV button once to return to the beginning of the currently playing chapter; press additional times to return to the beginning of previous chapters. When multiple titles exist on the disc and this command is executed within the first chapter of title, playback will return to the top chapter of the title immediately preceding the current one.

■ **Fast Forward**

Hold depressed the main unit's **SCAN/SKIP FWD** button, or the remote control unit's SCAN button. Release the button when near the desired point. If the remote control unit's SCAN button is pressed and released once, playback will enter continuous fast forward mode. Press the PLAY button at the point you with to resume normal playback.

■ **Fast Reverse**

Hold depressed the main unit's **SCAN/SKIP REV** button, or the remote control unit's SCAN button. Release the button when near the desired point. If the remote control unit's SCAN button is pressed and released once, playback will enter continuous fast reverse mode. Press the PLAY button at the point you with to resume normal playback.



■ To search for a desired scene (SEARCH function)

[Title Direct Search]

During playback:

1. **Press the TITLE/CHP FRM/TIME button.**
2. **Use the number buttons to enter the number of the desired title.**
   Example: to select title "3"
   Press number button 3.
   Example: to select title "10"
   Press number buttons 1 → 0 in order.
3. **Press SEARCH button.**
   Search can also be initiated by pressing the PLAY button.

During Stop Mode:

During stop mode, use the number buttons to perform title search.

Example: to select title "3"
Press number button 3.
Example: to select title "10"
Press number buttons >10 → 1 → 0 in order.

[Chapter Search]

1. **Press TITLE/CHP FRM/TIME button twice.**
2. **Use the number buttons to enter the chapter number.**
   Example: to select title "3"
   Press number button 3.
   Example: to select title "10"
   Press number buttons 1 → 0 in order.
3. **Press SEARCH button.**
   Search can also be initiated by pressing the PLAY button.
   Note:
   The search function cannot be used on discs displaying the **"Operation Inhibited"** message.

[Chapter Direct Search]

During playback, use the number buttons to perform chapter search.

Example: to select title "3"
Press number button 3.
Example: to select title "10"
Press number buttons >10 → 1 → 0 in order.
Note:
The search function cannot be used on discs displaying the **"Operation Inhibited"** message.

[Time Search]

1. **During playback, press the FRM/TIME button.**
   Alternately, press the TITLE/CHP FRM/TIME button three times.
2. **Use the number buttons to enter the desired time number.**
   Example: to designate the frame at 21 min 43 sec 17
   Press number buttons: 2 → 1 → 4 → 3 → 1 → 7 in order.
3. **Press the SEARCH button.**
   The selection can be made also by pressing the PLAY button.

Note 1:
The search function cannot be used on discs displaying the **"Operation Inhibited"** message.
Note 2:
When performing time search on DVD-video discs, actual playback may begin at a point somewhat separated from the designated time number.
Note 3:
Time search cannot be performed from the stop mode.
Note 4:
Depending on the structure of the DVD-Video used, some errors may occurs when time search is performed for time numbers located in a range extending from several frames before to several frames after the divisions between titles and chapters.

■ Frame Advance/Still Picture

[View a stopped (still) image]

Press the main unit's PAUSE/STEP FWD button, or the remote control unit's PAUSE / STEP button.
Note:
The still picture function cannot be used on discs displaying the **"Operation Inhibited"** message.

[Frame Advance Playback]

Press the STEP button.

Each time the STEP button is pressed, playback will advance by one frame.
Each time the STEP button is pressed, playback will reverse by one frame.
Note 1:
The frame advance function cannot be used on discs displaying the **"Operation Inhibited"** message.
Note 2:
Frame reverse play cannot be used during DVD-Video playback or DVD disc emulation.

■ **Slow playback**

During normal playback, hold the STEP / STEP button depressed.

During slow playback, the playback speed can be adjusted by pressing the STEP and STEP buttons.

SLOWER ← → **FASTER**

STEP3 - STEP1 - 1/16 - 1/8 - 1/4 - 1/2 - 1/1

Note 1:
No sound is produced during slow playback.
Note 2:
The slow playback function cannot be used on discs displaying the **"Operation Inhibited"** message.
Note 3:
If a still image playback appears shaky, use the **Function Menu**'s **SET UP** section → [**Playback**] → [**Video**] → [**Still Mode**] command to switch to **"Field"**.
Note 4:
The slow reverse play and 1/1 forward slow play function cannot be used during DVD-Video playback or DVD disc emulation.

■ **Repeat Play**

During playback of the chapter/title you wish to repeat, press the REPEAT button.

Each time the button is pressed, the unit will alternate between chapter repeat, title repeat, and repeat OFF.
Note 1:
The repeat playback function cannot be used on discs displaying the **"Operation Inhibited"** message.

[Repeat Playback of a Designated Scene]

At the beginning and end points of the scene you wish to repeat, press the RPT A-B button.

Note 2:
Repeat playback cannot span the borders between titles.
Note 3:
The repeat playback function cannot be used on discs displaying the **"Operation Inhibited"** message.

[To Return to a Specific Scene]

1. **At the point you will wish to return to, press the RPT A-B button.**
2. **Later during playback, when you wish to return to the designated point, press the PLAY button.**

To stop repeat playback, press the CLEAR button.
Note:
The repeat playback function cannot be used on discs displaying the **"Operation Inhibited"** message.

■ **To change the image angle**

During playback of a DVD-Video disc, press the ANGLE button.

Each time the button is pressed, the image alternates between the available angles. With DVD-Video discs containing multiple recorded angles of view, the angle can be switched as desired during playback.

Such discs are marked by the angle mark (📷) on the jacket.

■ **To Change the Subtitle Setting During Playback**

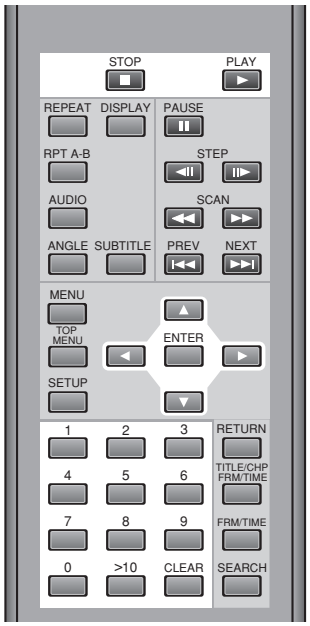
During playback of a DVD-Video disc, press the SUBTITLE button.

Each time the button is pressed, the subtitle display setting alternates between those available.
If multiple language subtitles are recorded on the disc, the subtitle can be selected from among those recorded. Some DVD-Video discs also allow subtitle selection from the disc's onscreen menu. In this case, display the menu by pressing the MENU button and select the desired subtitle setting directly from the menu.
When playing a DVD-Video disc, the subtitle setting selected here is temporary. When playback is stopped, the subtitle setting reverts to the default selected using the **SET UP** section → [**Playback**] → [**Language**] → [**Subtitle**] command.

■ **To Change Audio During Playback**

During playback of a DVD-Video disc, press the AUDIO button.

Each time the button is pressed, the audio alternates between those available.
If multiple language soundtracks have been recorded on the disc, the language can be selected from among those recorded. Some DVD-Video discs also allow language selection from the disc's onscreen menu. In this case, display the menu by pressing the MENU button and select the desired language setting directly from the menu.
When playing a DVD-Video disc, the language setting selected here is temporary. When playback is stopped, the language setting reverts to the default selected using the **SET UP** section → [**Playback**] → [**Language**] → [**Audio**] command.



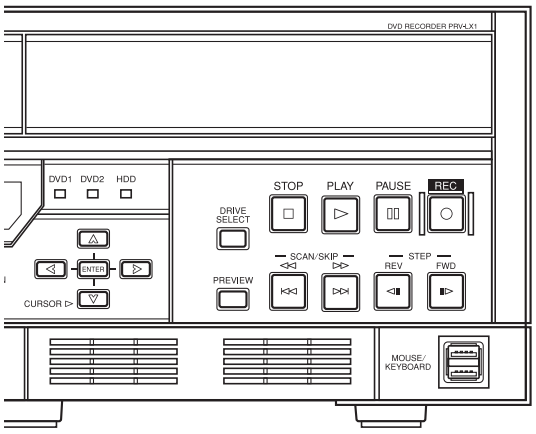
Playback Monitoring during Recording

If time shift playback is enabled on the **Function Menu** (**SET UP** section → [**Operation**] → [**HDD Recording**] → [**Time Shift PLAY**]), the **PLAY** button responds when recording is being made to the hard disk drive. Pressing the **PLAY** button allows the user to monitor images recorded immediately before.

SET UP section → [Operation] → [HDD Recording] → [Time Shift Play]

Playback may be started within the range 60-320 seconds after beginning recording **(Note 1)**. Basic operations are enabled during playback of the previously recorded images. The playback start position is the same as the recording start position, and the range of possible playback is within 60-320 seconds prior to the current recording point. During playback monitoring, the **REC** and **PLAY** buttons light, and during pause mode, the **PAUSE** button also lights.

If the **STOP** button is pressed during playback, playback monitoring stops and the screen display returns to show the point currently being recorded. Press the **STOP** button again to end the recording as well.



Note 1:

During time shift playback, the **PLAY** button enable start time will differ depending on the video rate and the audio encoding format, as shown in the following table.

Video RATE level	Dolby Digital Time shift (min:sec)	L-PCM Time shift (min:sec)
1	5:20	2:40
2	5:00	2:40
3	4:48	2:40
4	4:48	2:40
5	4:48	2:30
6	4:00	2:30
7	4:00	2:24
8	4:00	2:08
9	4:00	2:08
10	3:20	2:08
11	3:12	2:00
12	3:00	2:00
13	3:00	1:40
14	2:40	1:40
15	2:30	1:40
16	2:24	1:40
17	2:24	1:40
18	2:08	1:36
19	2:08	1:30
20	2:00	1:20
21	1:40	1:20
22	1:36	1:12
23	1:30	1:12
24	1:30	1:04
25	1:20	1:04
26	1:20	1:04
27	1:12	1:00
28	1:12	1:00
29	1:04	1:00
30	1:00	1:00
31	1:00	1:00
32	1:00	1:00

Note 2:

The interval required from the time the **PLAY** button is pressed until playback actually begins is about 10 seconds.

Note 3:

The minimum time shift playback difference is the time shown on the playback start time table plus about ten seconds.

Other Playback Settings

The **Function Menu**'s **SET UP** section → [**Playback**] commands can be used to input default setups for playback on the PRV-LX1. These setup values cannot be changed during playback.

■ **Video Aspect Ratio [Video] → [Aspect]**
4:3 (LB) / 4:3 (PS) / 16:9

Choose the aspect ratio setting in accordance with your television monitor. This setting is unnecessary when the unit is connected to a wide monitor. Most DVD-Video prerecorded movies are designed for wide televisions, and recorded with screen aspect ratio of 16:9. Accordingly, when DVD-Video discs are viewed on ordinary conventionally sized television monitors, the image will appear vertically elongated in a ratio of 4:3. If this ratio is not desired, use the aspect ratio command to set the ratio to a more pleasing value.

■ **Still Video Mode [Video] → [Still Mode]**
Auto / Frame / Field

Use this command to eliminate image shake and produce clearer still images when viewing still images of DVD-Video when progressive scan is turn OFF.

Auto:
Switches automatically between Field and Frame

Frame:
The normal mode. Some shakiness may be evident when viewing images from scenes with movement.

Field:
Eliminates shakiness from still images.

SET UP section → [Playback] → [Video]

■ **Audio Output Mode [Audio]**

Use to select the type of digital signal supported by the amplifier connected to the unit. Be sure to set this correctly since incorrect settings may cause the generation of noise. Consult the Operating Instructions for your amplifier when making this setting.

Dolby Digital OUT

Dolby Digital / Dolby Digital → PCM

Dolby Digital:
Select when connecting an amplifier or decoder supporting Dolby Digital.

Dolby Digital → PCM:
Dolby Digital signals are converted to linear PCM before being output. Select this setting when connecting an amplifier that does not support Dolby Digital.

DTS OUT

ON/OFF

ON:
Select when connecting an amplifier or decoder that supports DTS.

OFF:
Select when connecting an amplifier or decoder that does not support DTS.

96 kHz PCM OUT 96kHz / Convert to 48 kHz

96 kHz:
Select when connecting an amplifier or DAC that supports 96 kHz.

Convert to 48 kHz:
96 kHz signals are down-sampled to 48 kHz and output. Select this setting when connecting an amplifier that does not support 96 kHz.

MPEG OUT

MPEG / PCM

MPEG:
Select when connecting an amplifier or decoder that supports MPEG.

PCM:
MPEG signals are converted to linear PCM for output. Select this setting when connecting an amplifier that does not support MPEG.

SET UP section → [Playback] → [Audio]

■ **Audio Language Setting [Language] → [Audio]**
English / Japanese / Other
Use to set the audio language to English, Japanese, or Other **(Note)**.

■ **Sub-Title Selection [Language] → [Subtitle]**
English / Japanese / Other
Use to set sub-titles to English, Japanese, or Other **(Note)**.

■ **DVD Menu Language Selection [Language] →[DVD Menu]**
English / Japanese / Other
Use to set the DVD-Video menu language to English, Japanese, or Other **(Note)**.

SET UP section → [Playback] → [Language]

Note:
When [**Other**] is selected as the language, input the code number from the **"Language Code List"** on page 82.

SET UP section → [Playback] → [Language] → Inputting Language Code (Note)

■ **Parental Management Level [Other] → [Parental Level] 1-8**

Some prerecorded DVD-Videos with violence or sexual contents are encoded with parental management levels (low-high). Such discs are so indicated on their jackets or labels. By setting the management level on the PRV-LX1 to a value lower than the disc's level, the viewing of such discs can be restricted.

SET UP section → [Playback] → [Others]

Settings that can be made with the **Function Menu**'s **SET UP** section → [**Operation**] → [**Video Settings**] command include:

External Sync:	Enabled/Disabled
OSD:	Enabled/Disabled
Composite OUT:	Source Monitor/Decorder Out
Background Color:	Black/Blue
DV OUT:	Enabled (Note)/Disabled

▼ For more information regarding settings for composite output, see page 31, **"Composite/ RCA Output"**.

▼ For more information about TV monitor image selection in the idling condition, see page 31, **"Background Color"**.

SET UP section → [Operation] → [Video Settings]

Note 1:
Note that no DV output is possible during recording or preview, even if the [**DV OUT**] command is set to **"Enabled"**.

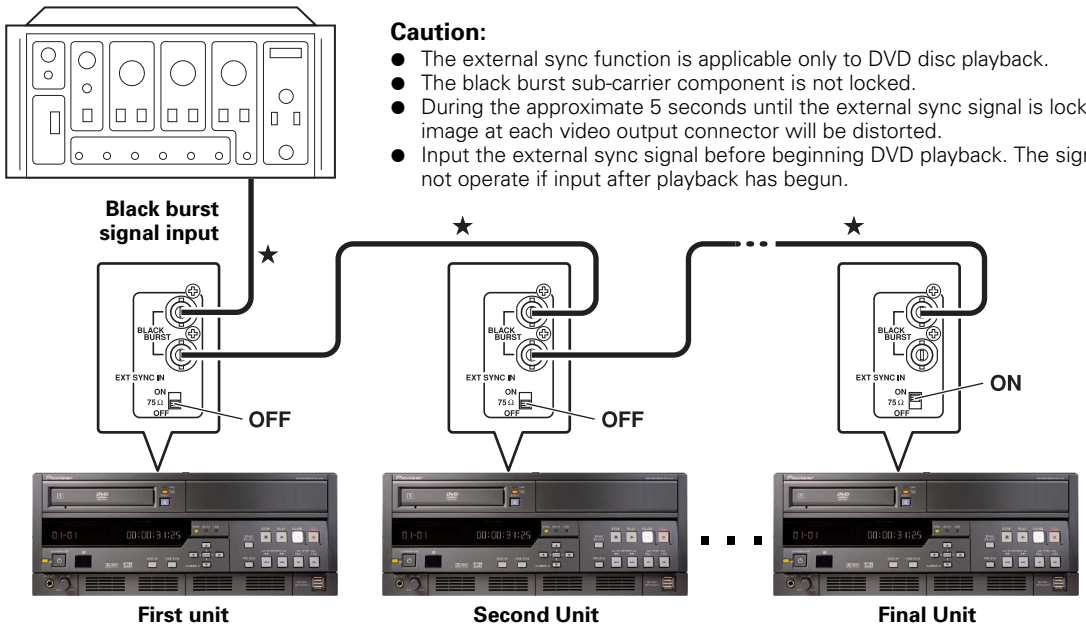
Note 2:
During playback, recording, or previewing of DVD discs encoded with copy protection, no output is produced at the DV Out connector, even if DV output is set to **"Enabled."**

External Sync Function

The PRV-LX1 can use an externally input sync signal (black burst) in order to synchronize the output video signal to an external signal (during DVD disc playback).
This function allows switching of the video without the need for connecting a time base corrector (TBC) component, thus allowing video switching without distortion (V roll) of the television monitor's image.

When synchronizing two or more recorders

- When inputting sync signal from one sync generator to two or more recorders:
- Be sure to set the final recorder's termination switch to ON, and the other recorders' termination switches to OFF.
- When applying sync to a single recorder, set the termination switch to ON.



Caution:

- The external sync function is applicable only to DVD disc playback.
- The black burst sub-carrier component is not locked.
- During the approximate 5 seconds until the external sync signal is locked, the image at each video output connector will be distorted.
- Input the external sync signal before beginning DVD playback. The signal will not operate if input after playback has begun.

Connection cables indicated with (★) must be purchased separately.

Other Functions

The **Function Menu**'s **SET UP** section → [**Operation**] → [**Video Settings**] → [**Test Signal**] command can be used to output a test pattern signal. To turn off the test pattern, press the **STOP** button or the **FUNCTION** button, or if a mouse is connected, click both right and left buttons simultaneously.

SET UP section → [Operation] → [Video Settings] → [Test Signal]

Regarding Progressive Scan Output

This unit allows the output of progressive scan video signals from the component output connector. To turn progressive scan output ON/OFF, press the controls on the front panel:

(CURSOR ▷) + (STOP □)

Press these buttons simultaneously.

Note 1:
Switching is not possible during disc playback.

Note 2:
Be sure the unit is connected to a television monitor supporting progressive-scan. Proper image reproduction will not be produced with other monitors.

Note 3:
When progressive output is ON, image signals will not be produced from output connectors other than the component output connector.

Note 4:
Some progressive scan monitors currently available do not possess complete compatibility with the PRV-LX1, with the result that some image distortion may occur. If such distortion is observed during progressive scan playback, set the PRV-LX1's output to interlaced.

DVD Menu Editing

This recorder is equipped with a number of built-in menu templates which can be selected with the **Function Menu**'s **EDIT** section → [**DVD Menu**] command, and associated with a recorded image for convenient production of DVD-Video discs.

In addition to being used with respect to recording projects currently selected, DVD menu editing can also be performed for the default DVD menu. Use the **EDIT** section → [**DVD Menu**] → [**Target**] → [**Menu Edit To**] command to select which menu the DVD menu editing will be performed. The default DVD menu is always used for new projects.

EDIT section → [DVD Menu] → [Target] → [Menu Edit To]

DVD Menu Type Selection

Use the **Function Menu**'s **EDIT** section → [**DVD Menu**] → [**Menu Type/Font**] → [**Menu Type**] command to select whether to make the DVD menu a title menu, chapter menu, or to add no menu.

EDIT section → [DVD Menu] → [Menu Type/Font] → [Menu Type]

Font Selection

The **Function Menu**'s **EDIT** section → [**DVD Menu**] → [**Menu Type/Font**] → [**Font**] command is used to designate the font to be used within the DVD menu. The choices available include **"**Helvetica**"**, **"**Times**"** and **"**Courier**"**.

EDIT section → [DVD Menu] → [Menu Type/Font] → [Font]

Note:

Also, when the **SET UP** section → [**Operation**] → [**GUI Control**] → [**Language**] command is set to **"Japanese"**, Japanese input is enabled.

The font used for Japanese display is Mincho-tai (明朝体). Characters input when the Japanese input is set to OFF will appear in the font selected with the font setting.

SETUP section → [Operation] → [GUI Control] → [Language]

DVD Menu Selection

When editing a menu, first use the **Function Menu**'s **EDIT** section → [**DVD Menu**] → [**Menu Design**] → [**Design Select**] command to choose a basic button layout pattern from the DVD menu templates displayed on the screen. Use the ▲/▼ buttons to select the layout pattern type, the ► button to change the number of buttons, and the **ENTER** button or the ◄ button to confirm the selection. The number and type of buttons which can be placed on a single page may vary, depending on the layout patterns available. Also, the following information is displayed in the window at the bottom of the screen: DVD Menu's disc name status OFF and maximum characters; thumbnails status; and button text status and maximum characters.

EDIT section → [DVD Menu] → [Menu Design] → [Design Select]

Thumbnail Selection

When the thumbnail type item is selected, the initial image of the title (Clip) corresponding to each button is automatically extracted (first frame of video for each button), but when the recording has already been made, the Function Menu's **EDIT** section [**DVD Menu**]**>** [**Menu Design**]**>**[**Thumbnail**] command can be used to extract the actual recorded image.

When "**Go To Video**" is selected, the thumbnail extraction screen appears and the clips are played back in the order in which they were recorded. While watching the clip/chapter numbers displayed at the top of the screen, use the mouse to click on the on-screen control bar's **SELECT** button or press the **ENTER** button at the place you wish to use as a thumbnail.

To assign the selected image as a thumbnail to a button, press SELECT then skip forward to the next image and press SELECT again. After all images are selected, press SAVE. If the CANCEL button is pressed, the image deselects and the screen returns to the Function Menu.

EDIT section → [DVD Menu] → [Menu Design] → [Thumbnail]

Thumbnail extraction screen

Button Text

When button text is selected, use the **EDIT** section → [**DVD Menu**] → [**Menu Design**] → [**Button Text**] command to select the format from the following choices:

Title (chapter): Number/Name
Title (chapter): Number
Title (chapter): Name

When name is selected, the name of the clip allocated to each title will be applied. The name can be changed during title editing (see page 56, **"Title Editing / Chapter Editing"**).

EDIT section → [DVD Menu] → [Menu Design] → [Button Text]

Setting Navigation Commands

The **Function Menu**'s **EDIT** section → [**DVD Menu**] → [**Navigation Cmd**] → [**First Play PGC**] setting can be used to set the DVD-Video disc's first play option to disabled, first title, or select from menu.

EDIT section → [DVD Menu] → [Navigation Cmd] → [First Play PGC]

Also, the **EDIT** section → [**DVD Menu**] → [**Navigation Cmd**] → [**Title Post Cmd**] command can be used to control the action taken upon completion of each title's playback, including stop, return to menu, or play next title.

EDIT section → [DVD Menu] → [Navigation Cmd] → [Title Post Cmd]

If **NEXT TITLE** is selected as a post command, once the last title is played back, the disc performs a REPEAT of all recorded titles on the disc.

Customizing the DVD Menu

Using the **Function Menu**'s **EDIT** section → [**DVD Menu**] → [**Menu Modification**] command, it is possible to change the background image and highlight colors of the DVD menu currently being edited. With this unit, a number of background images are used, and when the **EDIT** section → [**DVD Menu**] → [**Menu Modification**] → [**Background**] command is used to select **"HDD Library"**, the **EDIT** section → [**DVD Menu**] → [**Menu Modification**] → [**Image**] command can be used to select a background image (this operation is performed in the same way as for button layout pattern).

Using EDIT section → [DVD Menu] → [Menu Modification] → [Background] to select HDD Library

EDIT section → [DVD Menu] → [Menu Modification] → [Image]

Likewise, when the **EDIT** section → [**DVD Menu**] → [**Menu Modification**] → [**Background**] command is used to select "Title Picture", the first image of the first title (Cip) is automatically extracted. When a previously recorded image is used, however, the **EDIT** section → [**DVD Menu**] → [**Menu Modification**] → [**Image**] command can be used to extract a background image from the actual recording (the procedure is the same as that for extracting thumbnail images). The button layouts remains the same even when the background image is changed.

Using EDIT section → [DVD Menu] → [Menu Modification] → [Background] to select Title Picture

EDIT section → [DVD Menu] → [Menu Modification] → [Image]

Background image extraction screen

Customized button layouts and menu backgrounds captured to the recorder's hard disk drive via Ethernet or CD/DVD media appears within the layout and background windows of the DVD Menu section.

DVD Menu Editing

The **EDIT** section → [**DVD Menu**] → [**Menu Modification**] → [**Disc Name**] command can be used to insert a name (up to 32 characters long) into the DVD menu. The actual number of characters that can be embedded in the menu will differ depending on the menu design. Further, depending on design, excessive characters may drop out when too many are embedded. Be sure to use the preview function to confirm the menu appearance.

Note:

To input characters, connect a keyboard to the **MOUSE/KEYBOARD** USB jack.

EDIT section → [DVD Menu] → [Menu Modification] → [Disc Name]

The **EDIT** section → [**DVD Menu**] → [**Menu Modification**] → [**Select Color**] command allows you to change the display color that appears when each button is selected.

EDIT section → [DVD Menu] → [Menu Modification] → [Select Color]

Choosing "Auto" sets the Select color to white.

The **EDIT** section → [**DVD Menu**] → [**Menu Modification**] → [**Active Color**] command allows you to change the display color that appears when each button is finalized.

EDIT section → [DVD Menu] → [Menu Modification] → [Active Color]

Choosing "Auto" sets the Active color to white.

DVD Menu Preview

With the **Function Menu**'s **EDIT** section → [**DVD Menu**] command displayed, press the **Preview** button to display the DVD menu currently being edited. If no recorded image exists corresponding to a button on the DVD menu, no thumbnail will be extracted for that button, and it will instead appear with the default background image.
During preview display of the DVD menu, the **CURSOR** buttons can be used to move the button highlights. Highlights can also be moved by using the mouse cursor. If multiple menu levels exist, use the mouse to click on the **Next/Preview** button, or else use the **SKIP FWD/REV** button to switch between the various menus. If a mouse is connected, clicking the right/left buttons simultaneously enables the displayed control bar. Press the **FUNCTION** button to end the preview and return to the **Function Menu**.

Executing Preview command on EDIT section → [DVD Menu]

Progress bar during preview display

DVD menu preview image

Title Editing / Chapter Editing

When recording to hard disk drive, the names given to the multiple recorded image data (clips) can be changed. Other editing processes supported include trimming, chapter editing, and title order editing. DVD disc emulation can also be performed in order to confirm editing results.

The name, size and time of a clip selected with the **Function Menu**'s **EDIT** section → [**Title**] → [**Target Clip**] → [**Edit to (HDD)**] command can be confirmed by using the **EDIT** section → [**Title**] → [**Info/Rename**] command. In addition to changing the name of a clip, the **Delete** button can also be used to eliminate the clip if desired.

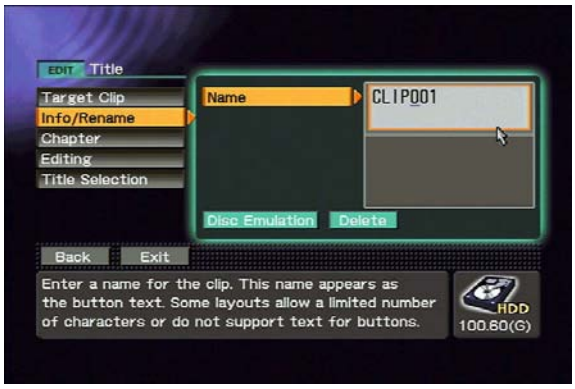
The clip name input here is reflected in the various button text when the DVD menu type is made the title menu. The actual number of characters that can be embedded in the menu will differ depending on the menu design. Further, depending on design, excessive characters may drop out when too many are embedded. Be sure to use the preview function to confirm the menu appearance.

Note:

To change clip names, connect a keyboard to the **MOUSE/KEYBOARD** USB jack.

EDIT section → [Title] → [Target Clip] → [Edit to (HDD)]

EDIT section → [Title] → [Info/Rename]



Changing the selected clip's name on EDIT section → [Title] → [Info/Rename] → [Name]

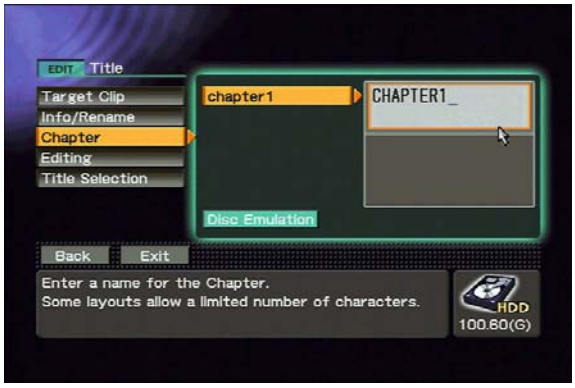
Editing Chapter Names

Individual names can be assigned to chapters existing within the clips selected with the **EDIT section → [Title] → [Target Clip] → [Edit to (HDD)]** command. When the **EDIT** section → [**Title**] → [**Chapter**] command is used to move to the chapter whose name you wish to change, character input is enabled. The chapter names input here are reflected in the various button text when the DVD menu type is made the **chapter menu**.

By default, no name is set. Also, when no name is set, standard designations such as **"chapter 1"** are automatically reflected in the button text. The actual number of characters that can be embedded in the menu will differ depending on the menu design. Further, depending on design, excessive characters may drop out when too many are embedded. Be sure to use the preview function to confirm the menu appearance.

Note:

To change chapter names, connect a keyboard to the **MOUSE/KEYBOARD** USB jack.



EDIT section → [Title] → [Chapter]

Title Trimming

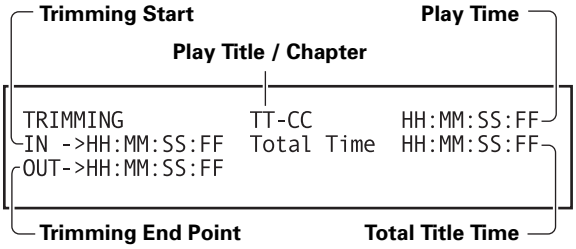
When you wish to cut out the first or last part of a clip, or to extract the middle part of a clip, use the **Function Menu**'s **EDIT** section → [**Title**] → [**Target Clip**] command to select the clip you wish to edit, then use the **EDIT** section's [**Title**] → [**Editing**] → [**Trimming Clip**] command to select **"Go To Video"**.

EDIT section → [Title] → [Editing] → [Trimming Clip]

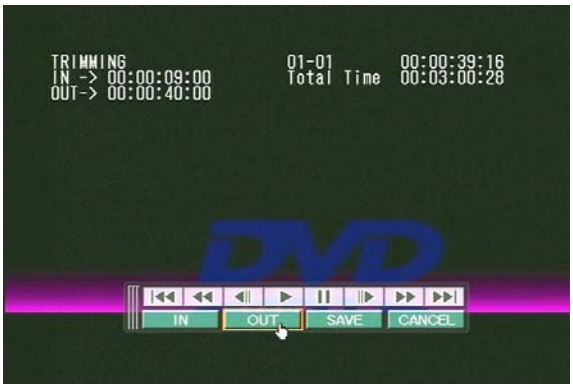
The control bar displayed in conjunction with the clip's playback can be used to designate IN/OUT points for parts to be deleted. During playback, when the control bar's **IN** button is pressed, that part of the clip preceding that point will be memorized as a cut point.

Similarly, pressing the **OUT** button will result the memorization of that portion of the video image following that point as a cut point. Attempts to input reversed IN/OUT points will be ignored.

Pressing the **SAVE** button will initiate trimming edit, and when completed, the screen will return to the **Function Menu**. Pressing the **CANCEL** button will cause the screen to return to the **Function Menu** without completing the edit.



OSD during Trimming



Trimming edit screen

Note 1:

With trimming edit, since direct editing is performed on the clip selected, the original clip cannot be restored. If the original clip is to be required later, begin a new project on the hard disk drive, and copy the clip or entire project to the newly initiated project (see page 60 **"Project Editing"**).

Note 2:

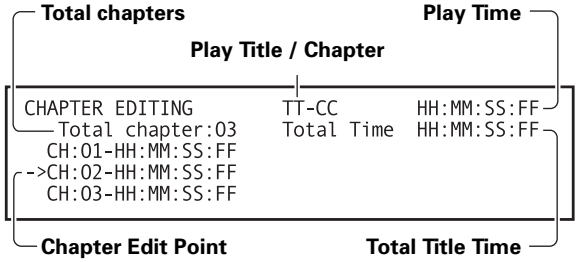
The clip size following trimming must be less than 4.7 GB.

Chapter Editing

Select a clip edited with the **Function Menu**'s **EDIT** section → [**Title**] → [**Target Clip**] command; by selecting **"Go To Video"** on the the **EDIT** section → [**Title**] → [**Editing**] → [**Chapter Points**] command, the selected clip's chapter mark position can be changed.

EDIT section → [Title] → [Editing] → [Chapter Points]

For this edit, use the **MARK** and **DEL** buttons on the control bar displayed in conjunction with the clip's playback. While playing back the clip, press the **MARK** button to insert a chapter mark at that point. When the **DEL** button is pressed, the chapter including the point at which the button was pressed is joined to the the previous chapter (in other words, the nearest chapter mark prior to that point is deleted). When the **SAVE** button is pressed, the chapter mark edit is effected, and when it is completed the screen returns to the **Function Menu**. Pressing the **CANCEL** button will cause the screen to return to the **Function Menu** without completing the edit.



OSD during Chapter Edit

Chapter mark insert

Erasing chapter marks

Note:

Chapter marks can be inserted only at the beginning of a group of pictures (GOP); as a result, actual chapter mark positions will be at the beginning of the GOP immediately following the marked time code.

Title Order Edit

In the DVD-Video format, the number of possible titles per disc is limited to 99. The projects created on this recorder, however, are capable of managing more than that number of clips. Fundamentally, the title numbers from 1 to 99 correspond to the clips in the order in which they are recorded, but beyond 99, the clips are not allocated to titles.

Using the **Function Menu**'s **EDIT** section → [**Title**] → [**Title Selection**] command, before final recording on the DVD disc, the clips can be allocated to a title in an order differing from that in which they were recorded.

EDIT section → [Title] → [Title Selection]

DVD Disc Emulation

The DVD disc emulation allows you to confirm the results of editing before recording those results to the final DVD disc. When the **Disc Emulation** button on the **EDIT** section → [**Title**] command is pressed, DVD menu editing, title editing and other editing results can be played back in the same form as they would be recorded on DVD disc. Following playback, the screen returns to the **Function Menu**.
When the **FUNCTION** button is pressed, the display returns to the **Function Menu**.

Executing the Disc Emulation command on EDIT section → [Title]

Recording to DVD Disc

Projects edited on hard disk drive can be recorded to DVD-Video disc by using the **EDIT** section → [**DVD Disc**] → [**Make a Disc**] command. By using the **EDIT** section → [**DVD Disc**] → [**Make a Disc**] → [**Target**] command, the destination drive used for the recording is designated as **"DVD1"**. If an additional expansion drive has been added, **"DVD2"** or **"DVD1&2"** can also be selected. Discs cannot be removed until the [**Make a Disc**] processing has been completed.
The volume label given to the DVD disc will be the same as the project name.

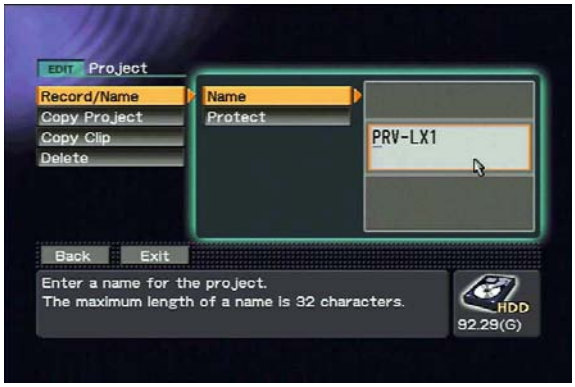
EDIT section → [DVD Disc] → [Make a Disc]

Executing the Make a Disc command on EDIT section → [DVD Disc]

Project Editing

This recorder manages recorded image data (clips) by the unit of "project." A single project can preserve multiple clips, and so long as the project is not changed, the numerous clips are preserved as a continuous series within the project. The **Function Menu**'s **EDIT** section → [**Project**] → [**Record/Name**] command can be used to confirm the number of clips, the project size, and the number of titles within the currently selected project.
Further, when a keyboard is connected, the **EDIT** section → [**Project**] → [**Record/Name**] → [**Name**] command can be used to change the name of the currently selected project.

EDIT section → [Project] → [Record/Name]



Changing project name on EDIT section → [Project] → [Record/Name]

Note 1:
To change project names, connect a keyboard to the **MOUSE/KEYBOARD** USB jack.

Note 2 :
Japanese characters cannot be used in project names.

The Protect command allows locking of the clips

Setting project clips protection on EDIT section → [Project] → [Record/Name] → [Protect]

Recorded data is also managed as a project when recording directly to DVD disc, but editing is not possible in this case.
By using the **EDIT** section → [**Project**] → [**Record/Name**] → [**Record To**] command to select **"DVD & HDD"**, the recorded images will be preserved on the hard disk drive even after finalizing and removal of

EDIT section → [Project] → [Record/Name] → [Record to]

Copying a Project

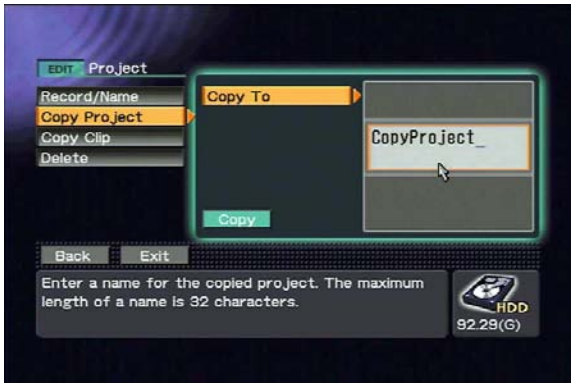
Using the **EDIT** section → [**Project**] → [**Copy Project**] command, the currently selected project can be copied to a new project. Use the [**Copy Project**] → [**Copy To**] command to enter the name of the new project.

Note 1:

To input project names, connect a keyboard to the **MOUSE/KEYBOARD** USB jack.

Note 2:

Japanese characters cannot be used in project names.



EDIT section → [Project] → [Copy Project] → [Copy To]

Copying Clips between Projects

Using the **EDIT** section → [**Project**] → [**Copy Clip**] command, clips in other projects can be copied to the currently selected project.

Executing Copy command on EDIT section → [Project] → [Copy Clip]

Deleting a Project

Projects are not automatically deleted, but preserved within the hard disk drive. When the available space on the HDD becomes low, use the **EDIT** section → [**Project**] → [**Delete**] command to select and delete unneeded projects in order to open up space on the drive.

EDIT section → [Project] → [Delete]

Disc Duplication

This command allows you to copy the source designated with the **Function Menu**'s **APP** section → [**Copy/Import**] → [**Copy**] → [**Source**] command to the destination designated with the [**Copy**] → [**Target**] command.
Copying cannot be performed when the source is a copy projected disc.

Note 1:
Only one image file can be constructed on the hard disk drive. If a disc differing from the original copy source disc is newly copied to the hard disk drive, the previous image file will be erased.

Note 2:
Image files with volume exceeding 4.7 GB cannot be copied to disc.

Note 3:
The time required for disc copying will differ depending on the disc's record and read performance.

Note 4:
Discs with copy-prohibited contents cannot be copied. When this unit is used to record copyrighted material, the permission of each copyright holder and neighboring rights holder must be obtained. Failure to obtain the permission of each rights holder can be punished by law. Pioneer disclaims any and all responsibility for any trouble arising between the user of this device and any such rights holders as the result of recording of copyrighted materials.

When only one DVD-R/RW drive is installed, the possible source and target combinations are as follows:

DVD1 (drive1) → HDD
HDD → DVD1 (drive1)

Executing Copy command on APP section → [Copy/Import] → [Copy] menu (Copying from DVD1 to HDD)

When two DVD-R/RW drives are installed, the following combinations are also available:

DVD2 (drive2) → HDD
HDD → DVD2 (drive2)

DVD1 (drive1) → DVD2 (drive2)
DVD2 (drive2) → DVD1 (drive1)

HDD → DVD1&2 (drive1&2)

APP section → [Copy/Import] → [Copy] (Copying from DVD1 to DVD2)

Using APP section → [Copy/Import] → [Copy] → [Source] to select HDD

Using APP section → [Copy/Import] → [Copy] → [Target] to select DVD1&2

Importing Image Data, Edit Lists

This function allows the importing of image data from CD/DVD discs or a web browser with FTP connection from a computer linked to an online network. These images can be then stored in the recorder's template library for use as DVD menu layout graphics and DVD menu backgrounds. Edit list (EDL) files can be similarly imported.

When using FTP to download images from the Internet, go to the **SET UP** section → [**System**] → [**Network**] command and confirm that network is set to **"ON"**. Also, The displayed IP address will be the connection destination. The user name and password necessary for FTP connection is as follows:

User Name: PRVUser
Password: prv-lx1

Following establishment of FTP connection, store files relating to the DVD menu in the menu folder; files regarding edit lists should be stored in the edl folder.

Files obtained via FTP from the network are temporarily stored in the hard disk drive's **Import Directory**; then, the **"Import Directory"** is designated using the **Function Menu**'s **APP** section [**Copy/Import**] → [**Menu Import**] → [**Source**] command; the files to be added to the template library are selected, and the **Add to Library** button is pressed to begin importing. The same procedure is used for importing Edit List files. When **"DVD1"** or **"DVD2"** is designated as the source, import is begun from the disc loaded in the respective drive when the **Add to Library** button is pressed.

Using APP section → [Copy/Import] → [Menu Import] → [Type] to select background image

APP section → [Copy/Import] → [Menu Import] → [Source]

Using APP section → [Copy/Import] → [Menu Import] → [Source File] to select import file

Using APP section → [Copy/Import] → [Menu Import] → [Type] to select layout image

To establish an FTP connection, with Microsoft Internet Explorer 6, enter the following text in the address bar:

ftp://xxx.xxx.xxx.xxx

Note: Where xxx.xxx.xxx.xxx is the recorder's IP address.

APP section → [Copy/Import] → [Menu Import] → [Source File]

APP section → [Copy/Import] → [EDL Import] → [Source]

APP section → [Copy/Import] → [EDL Import] → [Source File]

DVD menu layout image files are added to the DVD menu template selected with the **Function Menu**'s **EDIT** section → [**DVD Menu**] → [**Menu Design**] → [**Design Select**] command.
DVD menu background image files are added to the background library selected with the **EDIT** section → [**DVD Menu**] → [**Menu Modification**] → [**Background**] → [**HDD Libraly**] command.
Edit list files are stored in the EDL library selected with the **APP** section → [**Auto Capture**] → [**EDL Load/Save/Del**] → [**Load**] command.

DVD Menu Layout Image File Format

DVD menu layout image files are composed of a combination of text files providing detailed information about the various DVD menu settings, together with multiple image files. Plans are currently underway to make available a plugin that will allow the output of computer image editing software to be converted to an importable form.

DVD Menu Background Image File Format

Support is currently available only for Windows Bitmap (**.bmp**) format and JPEG (**.jpg**) format files.

Edit List File Format

Edit list files are text files with the **".edl"** filename extension. Composition is as follows:

Header: PIONEER-DVDRec-EDL 001
Entry: Number Operation Type Parameter 1 Parameter 2 Parameter 3

The number of parameters differs depending on the type of operation involved. Numbers are consecutive numerals beginning from 001.

■ **IN/OUT Point Setting Entry**

Number	Operation Type	Parameter 1	Parameter 2	Parameter 3
NNN	REC	IN Point	OUT Point	Post-REC action

The IN/OUT point is set using time code format as follows: HH:MM:SS:FF
Post-REC action will indicate either STOP or PAUSE.
The final IN/OUT point setting entry in an edit list must always designate the post-REC action as STOP.

■ **Chapter Point Setting Entry**

Number	Operation Type	Parameter 1
NNN	CHP	CHAPTER POINT

The chapter point is designated using time code as **HH:MM:SS:FF**. The chapter point description must come immediately below the IN/OUT point setting to which it is applied. Also, the Number value is given as that given to the IN/OUT point setting entry.

Note:
When importing a background image file, the recorder resizes the image's height and width to meet the menu requirements. Please **Preview** the menu before writing to a DVD disc.

■ **DVD-RW disc initialization**

Number	Operation Type
NNN	INI

Initialization can be applied only at the head of an edit list entry.

■ **Finalize**

Number	Operation Type
NNN	FNL

Finalizing can be applied only as the final entry of an edit list.

■ **Wait**

Number	Operation Type
NNN	WAI

The wait command can be used within a list, to designate points necessary to change a VTR tape, etc.

Edit List Example

```
Pioneer-DVDRec-EDL 001
001 INI
002 REC 01:00:05:00 01:10:12:00 PAUSE
002 CHP 01:03:25:00
002 CHP 01:06:30:00
003 REC 01:13:45:00 01:20:30:00 STOP
003 CHP 01:17:30:00
004 WAI
005 REC 01:25:00:00 01:26:00:00 STOP
006 FNL
```

Function

..... Initialize DVD-RW disc
..... Record Title 1
..... Title 1 Chapter 2 setting
..... Title 1 Chapter 3 setting
..... Record as continuation of Title 1
..... Title 1 Chapter 4 setting
..... Wait
..... Record Title 2
..... Finalize

Function Menu Table

EDIT	DVD Menu	Target	Menu Edit to	Selected Project at top menu	Select object for DVD menu editing.
				Default Menu	
		Menu Type/Font	Menu Type	Title Menu	Select DVD menu type.
				Chapter Menu	
				No Menu	
			Font	Helvetica	Select character font for DVD menu.
				Times	
				Courier	
		Menu Design	Design Select	Select Button Layout	Select button layout.
			Thumbnail	Go To Video	Set thumbnail for posting to button.
			Button Text	Number / Name	Select character format for button text.
				Number	
				Name	
		Menu Modification	Background	Default	Select original image for background image change.
				HDD Library	
				Title Picture	
			Image	Default	Select background image.
				Select Picture	
				Go To Video	
			Disc Name	(Text Edit)	Input characters for input to DVD menu.
			Select Color	Default	Set color select.
				11 colors List	
			Active Color	Default	Set active color.
				11 colors List	
		Navigation Cmd	First Play PGC	Disabled	First play setting.
				Title	
				Menu	
			Title Post Cmd	Stop	Select action after title playback.
				Return to Menu	
				Next Title	
	Project	Record/Name	Name	Selected project at top menu	Display name of currently selected project.
			Protect	Disabled	Lock project to protect from further editing.
				Enabled	
			Record to	DVD Only	Select whether to record also to HDD.
				DVD&HDD	
			Num of Clips	15	Display number of clips in project.
			Num of Titles	13	Display number of titles in project.
			Last Modified Date	2002.05.23 00:00:00	Indicates date on which project was last modified.
			Total Capacity	1234MB	Display total project capacity.

Function Menu Table

EDIT	Project	Copy Project	Copy To	(Text Edit)	Copy project to new project.
		Copy Clip	Copy From	Project List	Select project source for copy.
			Clip	Clip List	Select clip for copying.
		Delete	Delete	Project List except current project	Delete selected project.
	Title	Target Clip	Edit To (HDD)	Clip List	Select clip for edit.
		Info/Rename	Name	xxxxxxxx	Display name of clip (editing also possible).
			Total Time	xx:xx:xx	Display clip time.
			Capacity	xxxxxMB	Display clip capacity.
		Chapter	Chapter 1	(Text Edit)	Display name of chapter (edting also possible).
			Chapter 2		
			Chapter 3		
			Chapter 4		
			Chapter 5		
			Next Page		
		Editing	Trimming Clip	Go To Video	Perform clip trimming.
			Chapter Points	Go To Video	Edit chapter point position.
		Title Selection	Clip 1	CLEAR/ALL CLEAR/UP/DOWN/ CLIP LIST	Display clip allocated to title (change order ok).
			Clip 2		
			Clip 3		
			Clip 4		
			Clip 5		
			Next Page		
	DVD Disc	Finalize	Finalize	Selected Drive	DVD finalize.
		Initialize	Initialize	Quick Format	DVD-RW quick format.
				Full Blank	Erase all DVD-RW contents.
		Make a Disc	Target	DVD1	Select destination for recording selected project to disc and execute.
				DVD2	
				DVD1&2	
APP	Auto Capture	IN/OUT Point	Preroll Time	1 - 5 - 10 Seconds	Set pre-roll time.
			Offsest(Frame)	0 -- 17 -- 30 Frame	Set frame offset.
			Record As	Title(Stop)	Select OUT point operation.
				Chapter(Pause)	
				Pause	
			IN/OUT Point	(Time Code Setting)[Mark]	Set IN/OUT point.
		Chapter Point	Chapter Point	(Time Code Setting)[Mark]	Set chapter point.
		EDL Command	Command	Finalize	Designate additional special command to EDL.
				Initialize	
				Wait	

APP	Auto Capture	EDL	IN/OUT Point 1	CLEAR/ALL CLEAR/UP/DOWN	Perform editing of EDL.
			IN/OUT Point 2		
			IN/OUT Point 3		
			IN/OUT Point 4		
			IN/OUT Point 5		
			Next Page		
		EDL Load/Save/Del	Load	EDL List	Select edit list.
			Save	Current EDL	Save EDL or save with new name.
				Save As EDLxx	
			Delete	EDL List	Delete selected edit list.
	Copy/Import	Copy	Source	DVD1	Select copy source.
				DVD2	
				Image File (HDD)	
			Target	DVD1	Select copy destination.
				DVD2	
				DVD1&2	
				Image File (HDD)	
		Menu Import	Type	Background	Select type of background image.
				Layout	Select type of menu layout image.
			Source	Import Directory	Select source for importing of background image/menu layout image.
				DVD1	
				DVD2	
			Source File	xxxx.bmp	Select background image/ menu layout image for import.
				xxxx.jpg	
		EDL Import	Source	Import Directory	Select source for edit list import.
				DVD1	
				DVD2	
			Source File	xxxxxxxx	Select edit list source file.
				yyyyyyyy	

Function Menu Table

SET UP	System	System Settings	Keyboard	US type(101)	Select keyboard type.
				Japan type(106j)	
			Key Repeat Speed	Slow	Select key repeat speed.
				Medium	
				Fast	
			Mouse	Generic	Select mouse type.
			Mouse Speed	Slow	Select mouse cursor movement speed.
				Medium	
				Fast	
			TimeZone	–12 to +13, City Name	Select time zone.
			Date	xx/xx/2xxx	Set date.
			Time	xx:xx:xx	Set time.
		F-Key Set 1-6	F-Key Enable	F-Key Only	Select key combinations for function key operation.
				Ctrl + F-Key	
				Shift + F-Key	
			F1	Not Set IN(DV) Display Port / TC(RS-422A) Function Port / TC(DV) Drive Select TC(LTC) Preview DV Out REC PLAY PAUSE STOP Scan Fwd Scan Rev Skip Fwd Skip Rev Slow Fwd Slow Rev Step Fwd Step Rev Finalize Make a Disc EDL Rec VIN(Composite) VIN(S-Video) VIN(Beta) VIN(SMPTE) AIN(RCA) AIN(XLR)	Set allocation to function key F1.
			F2		Set allocation to function key F2.
			F3		Set allocation to function key F3.
			F4		Set allocation to function key F4.
			F5		Set allocation to function key F5.
			F6		Set allocation to function key F6.
		F-Key Set 7-12	F7		Set allocation to function key F7.
			F8		Set allocation to function key F8.
			F9		Set allocation to function key F9.
			F10		Set allocation to function key F10.
			F11		Set allocation to function key F11.
			F12		Set allocation to function key F12.
		Network	Network	OFF	Select whether to enable network.
				ON	
			DHCP/Manual	DHCP	Select IP address setting method.
				Manual	
			IP Address	xxx.xxx.xxx.xxx	Select manual IP address.
			Subnet Mask	xxx.xxx.xxx.xxx	Select manual sub-net mask.
			Gateway	xxx.xxx.xxx.xxx	Select manual gateway address.

SET UP	System	UPS Setting	Model	Disabled	Select UPS.
				APC Smart-UPS 500	
				APC Smart-UPS 700	
			Shutdown Delay	30 seconds	Select time until shutdown via UPS.
				60 seconds	
		Information	System Version	Application Ver / OS Ver	Display system version.
			Power-On Time	Total Hours	Display total power-on time.
			HDD Access	Total Hours	Display HDD access time.
			Drive 1(R/W)	Read/Write Time	Display Drive 1 operating time.
			Drive 2(R/W)	Read/Write Time	Display Drive 2 operating time.
		HDD Tools	Target Drive	Internal HDD	Format and confirm operation of data area of built-in HDD.
	Operation	Control Settings	Control	Local	Switch external control.
				Remote	
			Port	RS-422A	Select external control port.
				IEEE1394	
			Time Code	RS-422A	Select time code input.
				LTC	
				IEEE1394	
		Video Settings	External Sync	Disabled	Select external sync signal for playback.
				Enabled	
			OSD	Enabled	Enable/disable OSD display.
				Disabled	
			Composite OUT	Source Monitor	Enable/disable input pass-through for composite/RCA output.
				Decoder Out	
			Background Color	Black	Select background image during idling.
				Blue	
			DV OUT	Enabled	Enable/disable DV connector output. When enabled, outputs during playback only.
				Disabled	
			Test Signal	Start	Output color bar.
		HDD Recording	Time Shift PLAY	Enabled	Enable/disable playback of previous recorded portion during recording (time-shift recording).
				Disabled	
		GUI Control	Language	English	Select language for information display and character input on Function Menu.
				Japanese	
	Recording	Video/Audio	Video Encoding Rate	32 Levels Setting	Set encoding rate.
			Video Filter(NR)	16 Levels Setting	Set video filter level.
			Audio Encode	Dolby Digital	Select audio encoding format.
				LPCM	

Function Menu Table

SET UP	Recording	Video/Audio	Audio Level	(L) –48 to +14 setting	Set audio level.
				(R) –48 to +14 setting	
				(L/R) –48 to +14 setting	
			Aspect	4:3	Select video aspect ratio.
				16:9	
			Setup Level	0 IRE	Select setup level.
				7.5 IRE	
		Others	Auto Chapter	Manual	Select method for inserting chapter mark in title. When Manual is selected, chapter marks are inserted with ENTER button.
				3 min	
				5 min	
				10 min	
			REC Button	REC Start	Select REC button function.
				Standby ->REC	
	Playback	Video	Aspect	4:3(LB)	Select video aspect ratio during playback.
				4:3(PS)	
				16:9	
			Still Mode	Auto	Select still display mode.
				Frame	
				Field	
		Audio	Dolby Digital OUT	Dolby Digital	Select whether to convert Dolby Digital to PCM.
				Convert To PCM	
			DTS OUT	OFF	Set DTS.
				ON	
			96 kHz PCM OUT	Convert To 48kHz	Select whether to convert 96 kHz PCM to 48 kHz.
				96kHz	
			MPEG OUT	MPEG	Select whether to convert MPEG audio to PCM.
				Convert To PCM	
		Language	Audio	English	Select audio language.
				Japanese	
				Others	
			Subtitle	English	Select subtitle language.
				Japanese	
				Others	
			DVD Menu	English	Select DVD menu language.
				Japanese	
				Others	
		Others	Parental Level	1 - 8	Set parental level.

STATUS	Drive	HDD	Display currently selected recording destination/ playback source. Also change recording destination/playback source.
		DVD1	
		DVD2	
		DVD1&2	
	Project	[NEW]h03mmdd_xx	Display currently selected project. Also change project.
		Project List	
	V Input	Composite	Display currently selected video input. Also change video input.
		S-Video	
		Component(Beta)	
		Component(SMPTE)	
		DV	
	A Input	RCA	Display currently selected audio input. Also change audio input.
		XLR	
		DV	
	HDD	Project : xxx	Display number of projects on hard disc.
		Remaining : xxx.xx GB	Display remaining available space on hard disc.
	DVD1	No Disc	Display drive disc loading condition. (r) indicates recordable DVD; (f) indicates DVD has been finalized. DVD-RW indicates RW disc requiring initialization. DVD indicates ROM disc or DVD-R has been finalized.
		DVD-R(r)	
		DVD-RW(r)	
		DVD-RW(f) & Volume Name	
		DVD-RW	
		DVD & Volume Name	
		CD	
		Unknown	
	DVD2	No Disc	
		DVD-R(r)	
		DVD-RW(r)	
		DVD-RW(f) & Volume Name	
		DVD-RW	
		DVD & Volume Name	
		CD	
		Unknown	

Message Display

■ Messages displayed in dialogue box during Function Menu operations

Item	Message	Comment
Keyboard change	The setting will be effective, after next power on.	The changed keyboard setting will become effective after the unit is next powered on.
Network	Network Error, Check Connection.	Check Ethernet cable connection.
Number input	Input Parameter Error.	The input numbers are outside acceptable parameters. Input correct numbers.
HDD format	Delete All User Data?	Displayed at start of hard disk formatting operation. All data previously recorded on the hard disk drive will be erased.
HDD check	Start File System Check? OK or Cancel.	Displayed at start of hard disk check. Depending on the condition of the hard disk drive, this operation may require several minutes to complete.
Initialize	This is not a DVD-RW disc.	Only DVD-RW discs can be initialized.
Initialize	No disc in drive.	No disk has been loaded. Insert a DVD-RW disc.
Initialize	This disc has been finalized. Reinitialize to record.	Press the **Initialize** button to reinitialize the disc.
Initialize	Disc initialize failed.	Failure of the DVD-RW disc initialization. Check or replace disc.
Finalize	Must finalize disc.	Finalize the disc.
Finalize	Cannot be finalized.	This disc cannot be finalized.
Finalize	No disc in drive.	No disc has been loaded in the drive.
Finalize	The size of menu is too large.	The attached menu size is too large for the current project title composition. Change to a menu design with more buttons on each page of the menu. Also, by changing to title menu, it may be possible to construct the menu with a smaller volume.
Finalize	Disc finalize failed.	Failure of the DVD disc finalization. Check or replace disc.
Copy	Source is not ready or illegal disc.	Check copy source disc. Replica DVD discs and DVD-RW discs set for CPRM cannot be used as copy source.
Copy	No disc in drive.	No disc has been loaded. Insert a disc.
Copy	Target is not ready or illegal disc.	Check target disc.
Copy	The disc need to be initialize.	The DVD-RW disc has already been recorded. To rerecord the disc, initialize it once again.
Copy	The disc contains data.	When using DVD-R disc, insert an unused disc.
Copy	Copy disc failed.	An error occurred when writing to DVD disc. Check or replace disc.
Copy	Not enougth space to copy.	The target disc lacks sufficient open capacity to copy.
Copy	This will overwrite any existing copied image.	An image file coped from DVD disc already exists on the HDD. If a new file is copied to the HDD, the previous image file will be overwritten.
Menu Preview	More than 99 titles is not allowed.	This project has more than 99 titles. Use the Title editing **[Title Selection]** command to reduce the number of titles.

Item	Message	Comment
Menu Preview	Menu not specified for preview.	The [**Menu Type**] specifies **"No Menu."** To append a menu, use the [**Menu Type**] command.
Menu Preview	Data size is over 4.7GBytes.	The current project title capacity exceeds 4.7 GB. Use the Use the Title editing [**Title Selection**] command to reduce the number of titles, or use trimming editing to shorten the length of titles.
Menu Preview	The size of menu is too large.	The attached menu size is too large for the current project title composition. Change to a menu design with more buttons on each page of the menu. Also, by changing to title menu, it may be possible to construct the menu with a smaller volume.
Emulation	Data size is over 4.7GBytes.	The current project title capacity exceeds 4.7 GB. Use the Use the Title editing [**Title Selection**] command to reduce the number of titles, or use trimming editing to shorten the length of titles.
Emulation	The size of menu is too large.	The attached menu size is too large for the current project title composition. Change to a menu design with more buttons on each page of the menu. Also, by changing to title menu, it may be possible to construct the menu with a smaller volume.
Project-Delete	No target project is selected.	No project has been selected. Select a project to delete.
Project-Delete	This PROJECT is proected.	The selected project has been protected and cannot be deleted.
Project-Delete	Cannot delete new project.	The new project cannot be deleted.
Project-Copy	Enter new project name.	To copy a project, enter a project name.
Project-CopyClip	No target clip is selected.	Select a clip for copying.
Title-Trimming	This VOB cannot be trimmed.	The clip file size after trimming must be less than 4.7 GB.
Make a Disc	Data size is over 4.7GBytes.	The current project title capacity exceeds 4.7 GB. Use the Use the Title editing [**Title Selection**] command to reduce the number of titles, or use trimming editing to shorten the length of titles.
Make a Disc	The size of menu is too large.	The attached menu size is too large for the current project title composition. Change to a menu design with more buttons on each page of the menu. Also, by changing to title menu, it may be possible to construct the menu with a smaller volume.
Make a Disc	No disc in drive.	No disc has been loaded in the designated drive.
Make a Disc	This is not a blank disc.	The designated disc has recorded contents.
Make a Disc	Disc must be initialized.	The designated disc has not yet been initialized. Initialization is necessary before recording.
Make a Disc	This is an illegal disc.	The designated drive contains an improper disc.
Make a Disc	There is no title.	No title has been assigned.
Make a Disc	More than 99 titles is not allowed.	The number of titles currently exceeds 99.
Make a Disc	Make disc failed.	An error occurred when writing to DVD disc. Check or replace disc.

Message Display

■ Messages Displayed in Dialogue Box or Main Unit Display during Recording Operation

Item	Message	Comment
Recording	HDD_CAPA is not enough Remaining= **Kbyte	The hard disk drive has insufficient open capacity. Erase a project, to open enough space on the hard disk drive for the recording.
	DVD_CAPA is not enough Remaining= **Kbyte	The DVD disc has insufficient remaining capacity.
	This disc is not writable.	The DVD disc cannot be written to.
	There is no disc.	No disc has been loaded.
	Title num is 99.	This disc has 99 titles recorded; no additional titles can be recorded.
	No SDI_V Input	There is no SDI Video signal input.
	No SDI_A Inupt	There is no SDI Audio signal input.
	No AES/EBU Input	There is no AES/EBU signal input.
	No DV Input	There is no DV signal input.
	Copy Protection	The input signal has been copy protected; copying is not possible.
	OUT Point must be larger than IN Point +1 sec.	OUT Point must be larger than IN Point +1 sec.
	ENCODER ERROR ********	The leading byte is not FF, and second byte is C8 or above, caused by encoder error. Reboot system.
	ENCODER ERROR FF000001	Severe **map** frame number anomaly. Reboot system.
	ENCODER ERROR FF000002	**vro** read timeout. Reboot system.
	ENCODER ERROR FF000003	**map** read timeout. Reboot system.
	ENCODER ERROR FF000004	**vro** read error. Reboot system.
	ENCODER ERROR FF000005	**map** read error. Reboot system.
	ENCODER ERROR FFFFFF00	Disagreement of **map** and **vro GOP** number during REC stop. Reboot system.
	ENCODER ERROR FFFFFF01	Disagreement of **map** and **vro** file number. Reboot system.
	ENCODER ERROR FFFFFF02	Disagreement of **map** and **vro** file number during REC stop. Reboot system.
	ERROR ENCODER (main unit display)	(Appears on main unit display during above encoder errors).
	Drive error	Drive error encountered. Reboot system.
	DRIVE ERROR (main unit display)	Drive error encountered. Reboot system.

■ Messages Displayed in Dialogue Box during EDL Recording Operation

Item	Message	Comment
EDL REC	EDLFILE ERROR not start PIONEER-DVDRec-EDL	Repair **EDL** file.
	EDLFILE ERROR not support EDL VER***	**EDL** file version *** is not supported.
	EDLFILE ERROR: line ** Syntax error 01	**EDL** file error. Final **REC** must end with **STOP** command.
	EDLFILE ERROR: line ** Syntax error 02	**EDL** file error. No command was input after number.
	EDLFILE ERROR: line ** Syntax error 03	**EDL** file error. The **REC** before **INI** must end with **STOP** command.
	EDLFILE ERROR: line ** Syntax error 04	**EDL** file error. **REC** cannot be placed after **FNL**.
	EDLFILE ERROR: line ** Syntax error 05	**EDL** file error. Designate **CHP** after **REC**.
	EDLFILE ERROR: line ** Syntax error 06	**EDL** file error. **REC** before **FNL** must end with **STOP** command.
	EDLFILE ERROR: line ** Syntax error 07	**EDL** file error. Command not defined.
	EDLFILE ERROR: line ** Syntax error 08	OUT Point must be larger than IN Point +1 sec.

■ Messages Displayed in OSD or Main Unit Display during Playback Operation

Item	Message	Comment
DVD-Video playback	Incompatible disc region number.	This disc has a region code which cannot be played on this player.
DVD-Video playback	Operation cannot be performed.	This command is not supported with current playback condition.
DVD-Video playback	Operation is not permitted.	The operation is not permitted with this disc.
DVD-Video playback	No title on the disc.	The current disc has no playable titles.
DVD-Video playback	Unknown disc.	This disc cannot be played.
DVD-Video playback	ERROR REGION (main unit display)	This disc has a region code which cannot be played on this player.
DVD-Video playback	OPERATION INHIBITED (main unit display)	The operation is not permitted with this disc.
DVD-Video playback	DISC NO TITLE (main unit display)	The current disc has no playable titles.
DVD-Video playback	UNKNOWN ERROR (main unit display)	This disc cannot be played.
HDD playback	No title in the project.	The current project has no playable titles.
HDD playback	PROJECT NO TITLE (main unit display)	The current project has no playable titles.

TROUBLESHOOTING

Incorrect operations can be mistaken as malfunctions. If you believe the unit is not operating correctly, consult the chart below. Sometimes incorrect operation may be due to a malfunction in another component. If the problem is not fixed, check the other components used with the player. If the problem still persists, contact your nearest Pioneer authorized service center or dealer for service.

Symptom	Cause/Remedy	Reference page
No power	● Connect power cord to outlet.	16
No picture	● Check for proper connections.	16
	● Change TV or other input to the input connected to the PRV-LX1.	
	● If a non-progressive-scan television is connected to the component video output connector and the **Component output** is set to **Progressive (525p)**, no picture will appear. Hold the main unit's front panel **STOP** button depressed while pressing the cursor down button to switch the output to **Interlaced (525i)**.	49
	● When set to progressive scan (525P), no video image is output to connectors other than the component output.	
	● When [**Composite Out**] is set to **"Source Monitor"**, during stop mode or otherwise when no image in input to the composite input, no image will be output to the composite output connector. In the same way no sound will be output at the RCA output connectors if no audio is input to the RCA inputs.	31
After closing disc tray, it opens automatically, or playback will not begin.	● Insert the disc correctly in the disc tray.	
	● Insert disc with correct (recording) side down.	
	● Clean the disc.	7
	● Confirm that the disc region number is proper for the player.	9
	● Confirm that the type of disc is proper for the player.	8
	● Check and eliminate any condensation inside the unit.	5
	● Discs recorded in formats other than NTSC may not be playable.	
Can't record.	● Confirm that the HDD/DVD has adequate remaining capacity. If HDD/DVD are full, erase unneeded titles to add available space.	60, 61
	● Confirm that you are not attempting to record copy-protected material.	
	● With DVD-R/RW (video mode) discs, images which are designated as "copy once only" cannot be be recorded.	
Can't record in video mode on DVD-RW.	● Recording to Ver.1.0 DVD-RW discs is not supported. Be sure to use discs labeled as Ver. 1.1 or later (version number can be found on disc jacket).	
Image is elongated vertically or horizontally.	● If a disc's playback image appears elongated vertically or horizontally, use the [**Aspect**] command to change the aspect ratio for your television set. If the setting cannot be made at the recorder, use your television monitor controls.	46
External input images are distorted.	● When using components that output images encoded with analog copy protection signals, connect the component directly to the television monitor as well.	
During playback image is distorted or dark.	● This unit supports analog copy protection system. Discs containing analog copy protection signals may not record or play back properly. For these reasons, the PRV-LX1 should be connected directly to the television monitor as was as to other components.	
Cannot playback on DVD player / other DVD recorders.	● Be sure to finalie the disc after recording. However, some discs may be unplayable on other players even after finalization due to a DVD player's compatibility with DVD-R or DVD-RW media.	40
Image stops during playback, or commands are disabled.	● Press the **EJECT** button once and then start playback again.	

Symptom	Cause/Remedy	Reference page
Main unit command buttons don't work.	● Hold the **STANDBY/ON** button depressed for 4 seconds or more to set unit to standby condition. If the **STANDBY/ON** button also doesn't work, turn off the main power switch on the rear panel.	
Can't output 96 kHz audio in digital.	● Some discs prohibit digital output of 96 kHz linear PCM audio. In this case, even if the unit's [**96 kHz PCM OUT**] command is set to **"96 kHz"**, the signal will be converted to 48 kHz for output.	47
Remote control unit doesn't work.	● Operate remote within proper range (7 m). ● Change to new batteries.	17 17
Television malfunctions.	● Television monitors with wireless remote control functions may malfunction when the PRV-LX1's remote control unit is used. In such cases, separate the television monitor and the PRV-LX1.	
Memory settings are erased.	● If manual disconnection of the power cord or a power failure occurs when the unit is turned on, previously input settings may be erased. Disconnect the power cord only after pressing the **STANDBY/ON** button so that the display's **POWER-OFF** indicator goes out.	6
No sound from speakers, or distorted sound.	● If television or AV amplifier's sound volume is set to minimum, raise the sound volume. ● When using audio input from external input connector, set the [**Audio Level**] command. ● Check and confirm that all audio cables are connected properly. ● Check that all cable plugs are inserted securely in their connectors or jacks. ● Clean any dirt from connection plugs and jacks. ● No sound is produced during still, frame advance, and slow playback. ● DTS audio is output only from unit's digital audio output connectors. To listen to DTS audio from a DVD disc, the unit's digital audio output connectors must be connected to the digital audio input connectors of a DTS compliant amplifier, and the [**DTS OUT**] command must be set to **"ON"**. If the connected amplifier does not support DTS audio, use the remote control unit's **AUDIO** button or the disc menu to select an audio format other than DTS.	 34 46
When digital video camera is connected to the unit's **DV** connectors, video images can't be viewed on television monitor. Or no sound is audible.	● Check all connections. The PRV-LX1's **DV** connectors allow the connection of a single digital video camera. Connect the digital video camera directly to the PRV-LX1. ● Check that the DV cable is connected properly. ● Try turning the power to the digital video camera OFF then ON again. ● Turn the power to the PRV-LX1 OFF then ON again.	
DVD playback images can't be seen on the monitor screen of a digital video camera connected to the unit's **DV** connectors. Or no sound is audible.	● Check all connections. The PRV-LX1's **DV** connectors allow the connection of a single digital video camera. Connect the digital video camera directly to the PRV-LX1. ● Check that the DV cable is connected properly. ● Try stopping playback and then starting it again. ● Try turning the power to the digital video camera OFF then ON again. ● Turn the power to the PRV-LX1 OFF then ON again. ● The video and audio of DVDs labeled "copying prohibited" or "copy once only" cannot be output. ● The audio/video of a component connected to an external input connector cannot be output. ● No video or audio signals are output during recording or during recording pause. ● When using time shift playback (playback during recording), even if recording alone is stopped, output of playback video/audio will not begin. Stop playback temporarily, then start it once again to begin signal output. ● Set [**DV OUT**] to **"Enabled"**.	 48

Malfunctions may be caused by static electricity or other external sources. In such cases, normal operation may be restored by disconnecting the power cord and then reconnecting it again. If problem persist, consult your dealer.

Specifications

General:

Power rating:	AC 120 V, 50/60 Hz
Power consumption:	Maximum 2.0 A
Power consumption during idling:	6.5 W
Weight:	About 14 kg (about 31 lb)
External dimensions:	427 (W) x 179.5 (H) x 509.5 (D) mm 16-13/16 (W) x 7-1/16 (H) x 20-1/16 (D) in
Ambient temperature during use:	+5°C to +35°C (+41°F to +95°F)
Ambient humidity during use:	5-85% RH (without condensation)

Recording:

Recording format:	DVD: DVD-Video HDD: VOB FILE
Recordable discs:	DVD-R DVD-RW
Video recording format:	
Sampling frequency:	13.5 MHz
Compression:	MPEG
Audio recording format:	
Sampling frequency:	48 kHz
Compression format:	Dolby Digital and Linear PCM (non-compressed)
Recording time	
DVD-R/RW (manual rate) :	About 1-6 hours
HDD (manual rate):	About 23-100 hours

Playback:

Playable discs:	DVD-VIDEO, DVD-R, DVD-RW (CD-R, CD-RW, and CD-ROM are supported for data read only)

Video input:

Composite:	BNC x 1, 1.0 Vp-p, 75 Ω
S-VIDEO:	4-pin mini DIN x 1 Y: 1.0 Vp-p, 75 Ω C: 0.286 Vp-p, 75 Ω
Component:	BNC x 3 Y: 1.0 Vp-p, 75 Ω B-Y: 0.525/0.7 Vp-p selectable, 75 Ω (75% TR-K) R-Y: 0.525/0.7 Vp-p selectable, 75 Ω (75% TR-K)

Video Output:

Composite:	BNC x 1, 1.0 Vp-p, 75 Ω
S-VIDEO:	4P mini DIN x 1 Y:1.0 Vp-p, 75 Ω C: 0.286 Vp-p, 75 Ω
Component:	BNC x 3 Y: 1.0 Vp-p, 75 Ω Pb: 0.7 Vp-p, 75 Ω Pr: 0.7 Vp-p, 75 Ω

Audio input:

L, R: unbalanced:	Pin jack x 2, 2 Vrms (0 dBfs), 22 kΩ (or more)
CH1 (L), CH2 (R): balanced:	XLR (male) x 2, 0 dBu, 600 Ω

Audio output:

L, R: unbalanced:	Pin jack x 2, 2 Vrms (0 dBfs), 1.5 kΩ (or less)
CH1 (L), CH2 (R): balanced:	XLR (female) x 2, +4 dBu, 600 Ω load, low-impedance
Digital: unbalanced:	Pin jack x 1, 0.5 Vp-p, 75 Ω

External Sync Input:

BNC x 2, black burst, 0.3 Vp-p, 75 Ω (ON/OFF)

Other:

DV input/output:	4 pin (i.Link/IEEE 1394 compatible) x 1
LTC input:	BNC x 1, 0.5-8 Vp-p, 3 kΩ
Remote input:	D-sub 9-pin (female) RS-422A compatible x 1 (Inch threads)
Remote output:	D-sub 9-pin (female) RS-422A compatible x 1 (Inch threads)
UPS control:	D-sub 9-pin (male) RS-232C compatible x 1 (Inch threads)
VGA output:	Mini D-sub 15-pin (female) x 1 (Inch threads)
Mouse/keyboard connectors:	4P type A (USB 2.0 compatible) x 4
Ethernet:	8P type (IEEE802.3 compatible, category 5) x 1

Accessories:

Remote control unit:	1
AA batteries:	2
Air filter replacement set:	1
Power cord:	1
Warranty:	1
Operating Instructions:	1

- Specifications and appearance are subject to change without notice.

Language Code List

Language/Langue	Code	Language/Langue	Code	Language/Langue	Code
Japanese/japonais (ja)	1001	Hausa (ha)	0801	Quechua (qu)	1721
English/anglais (en)	0514	Hindi (hi)	0809	Rhaeto-Romance (rm)	1813
French (fr)	0618	Croatian (hr)	0818	Kirundi (rn)	1814
German (de)	0405	Hungarian (hu)	0821	Romanian (ro)	1815
Italian (it)	0920	Armenian (hy)	0825	Kinyarwanda (rw)	1823
Spanish (es)	0519	Interlingua (ia)	0901	Sanskrit (sa)	1901
Dutch (nl)	1412	Interlingue (ie)	0905	Sindhi (sd)	1904
Russian (ru)	1821	Inupiak (ik)	0911	Sangho (sg)	1907
Chinese (zh)	2608	Indonesian (in)	0914	Serbo-Croatian (sh)	1908
Korean (ko)	1115	Icelandic (is)	0919	Sinhalese (si)	1909
Greek (el)	0512	Hebrew (iw)	0923	Slovak (sk)	1911
Afar (aa)	0101	Yiddish (ji)	1009	Slovenian (sl)	1912
Abkhazian (ab)	0102	Javanese (jw)	1023	Samoan (sm)	1913
Afrikaans (af)	0106	Georgian (ka)	1101	Shona (sn)	1914
Amharic (am)	0113	Kazakh (kk)	1111	Somali (so)	1915
Arabic (ar)	0118	Greenlandic (kl)	1112	Albanian (sq)	1917
Assamese (as)	0119	Cambodian (km)	1113	Serbian (sr)	1918
Aymara (ay)	0125	Kannada (kn)	1114	Siswati (ss)	1919
Azerbaijani (az)	0126	Kashmiri (ks)	1119	Sesotho (st)	1920
Bashkir (ba)	0201	Kurdish (ku)	1121	Sundanese (su)	1921
Byelorussian (be)	0205	Kirghiz (ky)	1125	Swedish (sv)	1922
Bulgarian (bg)	0207	Latin (la)	1201	Swahili (sw)	1923
Bihari (bh)	0208	Lingala (ln)	1214	Tamil (ta)	2001
Bislama (bi)	0209	Laothian (lo)	1215	Telugu (te)	2005
Bengali (bn)	0214	Lithuanian (lt)	1220	Tajik (tg)	2007
Tibetan (bo)	0215	Latvian (lv)	1222	Thai (th)	2008
Breton (br)	0218	Malagasy (mg)	1307	Tigrinya (ti)	2009
Catalan (ca)	0301	Maori (mi)	1309	Turkmen (tk)	2011
Corsican (co)	0315	Macedonian (mk)	1311	Tagalog (tl)	2012
Czech (cs)	0319	Malayalam (ml)	1312	Setswana (tn)	2014
Welsh (cy)	0325	Mongolian (mn)	1314	Tonga (to)	2015
Danish (da)	0401	Moldavian (mo)	1315	Turkish (tr)	2018
Bhutani (dz)	0426	Marathi (mr)	1318	Tsonga (ts)	2019
Esperanto (eo)	0515	Malay (ms)	1319	Tatar (tt)	2020
Estonian (et)	0520	Maltese (mt)	1320	Twi (tw)	2023
Basque (eu)	0521	Burmese (my)	1325	Ukrainian (uk)	2111
Persian (fa)	0601	Nauru (na)	1401	Urdu (ur)	2118
Finnish (fi)	0609	Nepali (ne)	1405	Uzbek (uz)	2126
Fiji (fj)	0610	Norwegian (no)	1415	Vietnamese (vi)	2209
Faroese (fo)	0615	Occitan (oc)	1503	Volapük (vo)	2215
Frisian (fy)	0625	Oromo (om)	1513	Wolof (wo)	2315
Irish (ga)	0701	Oriya (or)	1518	Xhosa (xh)	2408
Scots-Gaelic (gd)	0704	Panjabi (pa)	1601	Yoruba (yo)	2515
Galician (gl)	0712	Polish (pl)	1612	Zulu (zu)	2621
Guarani (gn)	0714	Pashto, Pushto (ps)	1619		
Gujarati (gu)	0721	Portuguese (pt)	1620		

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Also add information on how to contact you by electronic and paper mail.

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Addendum
PRV-LX1 Operating Manual

(1) Precautions when starting (Page 6)
After powering off the unit, the orange indicator light located next to the power button will illuminate. Please wait a minimum of 2 seconds before restarting the unit.

(2) HDD Tools (Page31)
To format the internal HDD (this process will delete all user data, video & audio recording to the HDD), please select the HDD as the target drive. The FORMAT command is unavailable when drive, DVD1 or DVD2, is selected.

(3) Composite / RCA Output (page31)
The only way to view pass-through E-to-E (non-encoded) video and audio from the video source through the LX1 to is on the composite and RCA terminals. (This is done by selecting the Source Monitor setting in the GUI, as shown above.) This is true even if the LX1 is set up to record signals coming in through other AV inputs. When the Source Monitor setting is selected if the On Screen Display is activated, the output to the monitor will switch from pass-through to the decoding signal.

(4) Input Selection (Page 32)
LPCM audio encoding is not available when selecting DV as an input.

(5) Input Selection (Page 32)
When the following status is changed, DV audio format auto-detection is issued. While this auto-detection is running(approximated 2-3 seconds), the preview and recording options are not available for 2-3 seconds under the following conditions:

1. Change the input device setting
2. Change the recording setting
3. Immediately after connecting a DV cable or right after *playing* video on a connected DV device.

*Note: Pressing PREVIEW after performing one of the above actions (1-3), causes a message, “No DV Input”, to display on the monitor during the 2-3 second auto-detection process. This is not an error.

(6) Other Recording Setting (Page 34)
LPCM audio encoding is not available when selecting DV as an input.

(7) External Sync Function (Page 48)
When enabling DV OUT in the SET UP section [**Operation**]-[**DV OUT**], the External Sync automatically changes to **"Disabled"**. However, setting the [**DV OUT**] to **"Disabled"**, does not change the External Sync setting.

(8) Font selection (Page 50)
When Japanese is used in a Clip Name, Chapter Name or Disc Name, a Japanese font (Mincho-tai) is used for the DVD Menu including text and numbers.

(9) Importing Image Data, Edit Lists (Page 63)
When selecting a drive, DVD1 or DVD2, as a [**Source**] for Importing Image Data and Edit Lists, insert the disc first then select the drive. The drive does not *refresh* the [**Source File**] when the disc is inserted after the drive is selected.

(10) Messages Displayed in Dialogue Box during Function menu Operation (Page 75)

Item	Message	Comment
Project – CopyClip	No target Clip is selected.	Select a clip for coping. The same message will appear in case of copy clip operation to the project which already has 255 clips in it.

(11) Messages displayed in the Dialogue Box during an EDL Recording Operation (Page 76)

Item	Message	Comment
Recording	Stop operation is needed to finish IN/OUT recording.	Record of the previous clip ended with a Pause command. The Auto-capture process does not stop until the Stop button is pressed or a -Stop command (REC STOP) is issued from the EDL.